

education for the real World



CALE 20 U A T E

Caroline Sigouin Archives SGW - H 1015

University Mailing Addresses_

Sir George Williams Campus

1455 de Maisonneuve Blvd W. Montréal, Québec H3G 1M8 Loyola Campus 7141 Sherbrooke St. W. Montréal, Québec

H4B 1R6

Web Address

http://www.concordia.ca

Communication of Information to Provincial Ministry of Education

Under the terms of an agreement between Concordia University and the provincial Ministry of Education, approved by the Québec Access to Information Commission, Concordia University is required to transmit to the Ministry some or all of the following information concerning its students: the student's permanent code, complete name, date of birth, gender, father's complete name, mother's complete name and place of birth. This information is being transmitted, at the Ministry's request, in order to provide the Ministry with the tools to properly calculate funding for Concordia University, for planning purposes and to ensure the proper management of public funds.

Published by the Office of the Registrar under the auspices of the Vice-Rector, Services_____

Editor: Cynthia Foster

Design: Christopher Alleyne, Marketing Communications, Concordia University

Photographs: S. Bourboulis, P. Carpenter, L. Clemen, B. Hynes, S. Kretzschmer, M-J. Morel, X. Nuez, C. Skarstedt, T. Too, É. Tremblay

Printed by: Interglobe Beauceville Inc.

Printed on Recycled Paper

CONCORDIA UNIVERSITY'S MISSION STATEMENT

Concordia is an urban university which is responsive to the needs of a diverse student population as well as to the bilingual and multicultural environment in which it resides. It is a welcoming community where values of equality, nondiscrimination and tolerance of diversity are appreciated and actively promoted. Furthermore, Concordia is committed to responsible and innovative leadership in fulfilling the mission of universities to develop and disseminate knowledge and values and to act as a social critic. The University seeks to achieve this end by offering its students inclusive and accessible academic programmes which stress a broadbased, interdisciplinary approach to learning, as well as by a dedication to superior teaching supported by the best possible research, scholarship, creative activity and service to society. Through these means, the University prepares its graduates, at all levels, to live as informed and responsibly critical citizens who are committed to learning and to the spirit of enquiry.

The Calendar is an official University document defining academic programmes and the regulations which pertain to them. It is accurate as of its printing date. The University Senate reserves the right to modify the academic programmes and regulations at its discretion after the publication date of the Calendar. In addition, the University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of the upcoming academic year. The most current information is available from the Office of the Registrar and, for graduate programmes, the School of Graduate Studies. Moreover, the information contained in the Calendar or any other University document related to academic programmes and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

- Not all courses listed in this Calendar are offered this year. Students are advised to consult the Undergraduate Class Schedule for a timetable of courses offered.
- For information concerning graduate programmes, contact the School of Graduate Studies — (514) 848-3800. The office is located at 2145 Mackay Street near the Hall Building.

Concordia University is a totally smoke free environment as of January 1, 1993. (Policy Manual C SR-3) Effective January 1996, offenders will be fined \$25 per infraction.

PRICE: \$7.00 plus postage and handling

Copies of the Calendar are available at Concordia bookstores.

TABLE OF CONTENTS

	Section	Page
ACADEMIC CALENDAR	11	13
ADMINISTRATION	12	19
ADMISSION REGULATIONS	13	25
MATURE ENTRY	14	33
TUITION AND FEES	15	39
ACADEMIC INFORMATION: DEFINITIONS AND REGULATIONS	16	45
RIGHTS AND RESPONSIBILITIES	17.10	68
OMBUDS OFFICE	17.20	77
STUDENT LIFE AND STUDENT SERVICES Student Life and Student Services Dean of Students Advocacy and Support Services Counselling and Development Health Services Recreation and Athletics Financial Aid and Awards Office Socio-Economic Services	18.1 18.2 18.3 18.4 18.5 18.6 18.7 18.8	79 80 80 80 82 84 85 86 90
STUDENT AND ALUMNI ASSOCIATIONS	19 20	91
CENTRE FOR CONTINUING EDUCATION	21	103
OPEN AND DISTANCE LEARNING	22	109
TEACHER TRAINING AND CERTIFICATION	23	111
INSTITUTE FOR CO-OPERATIVE EDUCATION	24	113
CONVOCATION MEDALS AND PRIZES	25	119
FACULTY OF ARTS AND SCIENCE	31	123
Arts and Science	31.001	124
Programmes and Admission Requirements	31.002	125
Degree Requirements	31.003	128

Adult Education (see §31.090.1)		
Applied Human Sciences	31.010	133
Biology	31.030	142
Chemistry and Biochemistry	31.050	150
Classics, Modern Languages and Linguistics	31.060	157
Communication Studies	31.070	173
Economics	31.080	183
Education	31.090	191
English	31.100	203
English as a Second Language (see §31.320)		
Études françaises	31.110	216
Exercise Science	31.120	232
Geography	31.130	238
Geology	31.140	245
History	31.160	249
Interdisciplinary Studies	31.170	260
Journalism	31.180	265
Leisure Sciences (see §31.010)		
Library Studies	31.190	269
Mathematics and Statistics	31.200	272
Philosophy	31.220	282
Physics	31.230	288
Political Science	31.240	294
Psychology	31.250	304
Religion	31.270	314
Science and Human Affairs	31.300	322
Sociology and Anthropology	31.310	325
Southern Asia Studies (see §31.170)		
Teaching of English as a Second Language	31.320	337
Theological Studies	31.330	344
Urban Studies	31.340	348
Women's Studies (see §31.560)		
Computer Science (Minor)	31.400	351

Colleges, Institutes and Schools	31.500	351
Co-operative Education	31.515	351
Liberal Arts College	31.520	352
Lonergan University College	31.530	356
School of Community and Public Affairs	31.540	359
Science College	31.550	362
Simone de Beauvoir Institute and Women's Studies	31.560	365
FACULTY OF COMMERCE AND ADMINISTRATION	61	369
Commerce and Administration	61.10	370
Admission Requirements	61.20	370
Undergraduate Degree Programmes	61.21	371
The Credit Core	61.22	371
General Information	61.30	373
Faculty of Commerce and Administration Courses	61.35	374
Accountancy	61.40	376
Decision Sciences and Management Information Systems	61.50	380
Economics	61.60	384
Finance	61.70	385
International Business	61.80	389
Management	61.90	391
Marketing	61.100	395
Administration	61.120	398
Programme Options for Non-Commerce Students	61.140	399
Computer Science	61.150	400
Special Certificate Programmes	61.160	400
Special Programmes in Accountancy	61.170	400
FACULTY OF ENGINEERING AND COMPUTER SCIENCE	71	403
Faculty of Engineering and Computer Science	71.10	404
BEng	71.20	407
Department of Electrical and Computer Engineering	71.30	411
Department of Mechanical Engineering	71.40	416
Department of Building, Civil and Environmental Engineering .	71.50	421

Engineering Course Descriptions	71.60	425
Department of Computer Science	71.70	448
Digital Image/Sound and Computer Science	71.80	458
FACULTY OF FINE ARTS	81	461
Programmes and Admission Requirements	81.10	462
Degree Requirements	81.20	464
Fine Arts Courses of Faculty-Wide Interest	81.30	466
Interdisciplinary Studies in Sexuality	81.35	467
Art Education and Art Therapy	81.40	468
Art History	81.50	472
Mel Hoppenheim School of Cinema	81.60	478
Contemporary Dance	81.70	489
Design Art	81.80	491
Digital Image/Sound and the Fine Arts	81.90	495
Music	81.100	497
Studio Arts Studio Art Ceramics Fibres Interdisciplinary Studies Painting and Drawing Photography Print Media Sculpture Women and the Fine Arts	81.110	507 507 508 509 510 510 511 511 512 513
Theatre	81.120	523
FACULTY	100	531
EQUIVALENTS INDEX	200	557
AWARDS, PRIZES AND SCHOLARSHIPS	300	575
GRADUATE PROGRAMMES	400	595
INDEX	500	599

Concordia University is one of the largest urban universities in Canada. It has two campuses — one in downtown Montréal (Sir George Williams), the other in a residential setting in the city's west end (Loyola).

The University has long promoted accessibility, innovation and an interdisciplinary approach to learning as its fundamental characteristics. As an urban university, it is also responsive to Montréal's bilingual and multicultural environment, and has a strong tradition in part-time education.

Approximately 94% of Concordia's students are Canadians and 6% are International students. Approximately 15% of Concordia students list French as their mother tongue.

More than 4,000 students a year are granted degrees at the graduate and undergraduate levels. Over 500 students earn scholarships and fellowships.

Concordia employs about 2,600 people, both full-time and part-time, including 696 full-time professors, 795 part-time instructors (CUPFA only), and 26 professional librarians. Among the part-time instructors is a large number of professionals drawn from the artistic community and the business world.

For the last fiscal year, the value of grants and contracts allotted to Concordia researchers is in the amount of 16.5 million dollars. Particularly active areas of research are Psychology, Electrical and Computer Engineering, Mechanical Engineering, and Computer Science. Other research strengths are Building Studies, Transportation Engineering, Cell and Molecular Biology, Behavioural Neurobiology, Human Development and Management Studies.

Concordia recognizes the increasing importance of international academic relations and it operates a Centre for International Academic Cooperation to encourage, monitor and co-ordinate the University's international activities. During the past decade, Concordia professors have travelled to more than 100 countries, and Concordia continues to play host to visiting students and professors from every corner of the globe. Formal linkages have been established with universities in Brazil, the People's Republic of China, France, Germany, Hong Kong, India, Israel, Japan, the Netherlands, Poland, Trinidad and Tobago, the United States and Zimbabwe. Research and study programmes have also been held in Costa Rica, Great Britain, Greece, and Italy, among others.

The University holds the distinction of being the first in the western world to establish a joint doctoral programme with a university in The People's Republic of China, and Concordia is still active in that country. Formal exchange programmes have been established with eight of the PRC's leading academic institutions. As a consequence, Concordia professors now travel to China to teach PhD courses in Civil Engineering, Computer Science, and a growing array of other disciplines in the arts, sciences and engineering.

Concordia is the only English-language University in Québec with a Co-operative Education programme, a process by which academic study terms are alternated with work terms in business and industry to give students practical, on-the-job experience. The areas of work experience included in the Concordia programme are Accountancy, Biochemistry, Building Engineering, Chemistry, Civil Engineering, Computer Science, Economics, Electrical Engineering, French Translation, Industrial Engineering, Management Information Systems (MIS), Mathematics, Mechanical Engineering, and Physics.

Established in 1974 with the merger of Loyola College and Sir George Williams University, Concordia offers more than 250 graduate and undergraduate programmes in four Faculties (Arts and Science, Commerce and Administration, Engineering and Computer Science, and Fine Arts) and the School of Graduate Studies. At the undergraduate level, the University offers BAdmin, BA, BComm, BCompSc, BEd, BEng, BFA, and BSc degrees.

At the graduate level, the University awards MA, MSc, MTM, MBA, MASc, MCompSc, MEng, and MFA degrees.

Programmes leading to the PhD degree are offered in Administration, Art Education, Art History, Biology, Building Studies, Chemistry, Civil Engineering, Communication, Computer Science, Economics, Educational Technology, Electrical and Computer Engineering, History, Humanities, Mathematics, Mechanical Engineering, Physics, Psychology, Religion, and in Special Individualized programmes.

The following graduate certificate programmes are offered: Cultural Affairs and Event Management, Community Organizational Development, Management Accountancy, Management of Health Care Organizations, Building Engineering, Environmental Engineering, and Mechanical Engineering.

The University also offers graduate diploma programmes in Accountancy and Administration, Adult Education, Advanced Music Performance Studies, Art Education, Communication Studies, Computer Science, Economic Policy, Instructional Technology, Journalism, Sport Administration, and Translation.

Enrolment as of Fall 1999 was:

Full-time undergraduate	11,482	Full-time graduate	2,612
Part-time undergraduate	8,304	Part-time graduate	662
Independent students	2 258	_	

In addition to the programmes described in this Calendar and in the School of Graduate Studies Calendar, the University offers a wide range of summer courses and programmes on both campuses. A separate publication listing summer offerings is published annually.

Concordia is on the Internet with a Web site that allows visitors to learn all about the University. Options allow the user to access academic information, go on a tour of the libraries, locate campus activities, find information for students and about administrative services, search through the directory and sign the guestbook. Concordia's Web site address is http://www.concordia.ca.

Service Centre

Located in the J.W. McConnell Library Building, the Birks Student Service Centre is a one-stop service centre that provides integrated front-line Admissions, Student Accounts as well as all registrarial services. In addition, the Centre maintains a self-service touch-screen terminal for reports of standing. Other self-service applications available to students include CARL — Concordia Automated Response Line, a bilingual touch-tone system for grades and registration.

The Birks Student Service Centre also offers Campus Tours services. These include not only information on academic programmes and university activities but also self-guided, general, and customized visits of both campuses.

Libraries

Concordia University Libraries include the Webster Library on the Sir George Williams Campus (downtown) and the Vanier Library on the Loyola Campus. Both libraries offer the same services, although their collections differ in content. Collections include books, periodicals, indexes, government publications, microforms, audio-visual materials and electronic resources.

Both libraries have reference and research collections in support of the programmes and courses offered on their respective campuses. The Webster Library meets the needs of students in commerce and administration, fine arts, particularly the visual arts, humanities, social sciences (including education), engineering and computer science, and pure and applied sciences.

The Vanier Library collection includes the areas of commerce and administration, fine arts, particularly the performing arts, theatre and music, humanities, social sciences and some sciences (mathematics and exercise science).

Various electronic information services are available in both libraries. CLUES, the library information system, includes the catalogue of the libraries' collections and links to external databases. Students can also choose from a number of bibliographic and full-text databases which provide references to periodical literature in most subject areas; many of these databases can be searched from home.

Users can consult subject librarians, who are responsible for both selection and reference work within defined subject areas. In addition to providing assistance to researchers, subject librarians offer individual and group instruction in research methodology, including the use of electronic resources.

Undergraduate students may borrow books for a two-week period. Audio-visual materials may have a shorter loan period. The libraries' interlibrary loan service facilitates document delivery and borrowing of materials from other libraries at the local, national or international level.

Complete information concerning the libraries' collections and services, including the names of subject librarians, is made available in print format in the libraries or in electronic format on the libraries' Web site at http://juno.concordia.ca.

Instructional and Information Technology Services

Instructional and Information Technology Services (IITS) provides computing and audio-visual resources and services to students, researchers, the library, and the University administration. The Department maintains a high-speed data communications network which brings together the many buildings and the two campuses; this network is itself linked to the international community via the Internet. Available computing resources include several super-mini computers, extensive lab facilities offering 250 public access personal computers (150 Pentium and 486 level DOS machines, 100 Macintosh), Internet access, and specialized graphics equipment. A comprehensive software library is available including numerical analysis routines, statistical processing packages, database products, simulation languages, graphics support, all widely used computer languages, text processing, on-line news services and many other general purpose utilities. IITS provides around-the-clock computer access, with consulting services available during normal University operating hours. Newsletters and information sheets (*Info Notes*) detail these services and facilities, and are available at the service areas located on each campus.

IITS operates three audio-visual equipment depots, primarily responsible for media services in teaching areas, but also providing over-the-counter sales of materials and loan of equipment to students, faculty and staff.

The facilities in the IITS Learning Laboratories, media workshops (AVISTAs), television and sound studios, preview and presentation rooms, cinemas and media library, are also available to students, faculty and staff, on an individual basis, for self-instruction, training and the preparation of presentation materials.

Professional production services and consultation are available in the areas of video, sound, graphics, photography, computer controlled presentation and distance education.

The University is a member of the Québec educational television network, CANAL, which broadcasts a variety of credit and non-credit courses, lectures, seminars and interviews on UHF Channel 29 in the Montréal region and on Cable 23 in other areas of Québec.

Art Galleries

The Leonard and Bina Ellen Art Gallery is located in the J.W. McConnell Building. One of the major small museums in Canada, the Gallery features a year-round programme of exhibitions of Canadian art in all visual media. Most presentations are organized by the Gallery's own staff, but some shows are brought in from other art institutions across Canada.

The Gallery has a permanent collection of Canadian art with a special emphasis on modern and contemporary work. The collection includes painting, sculpture, works on paper, mixed media and photography. Selections from the collection are frequently included in the Gallery's exhibitions. Illustrated bilingual publications accompany the majority of the exhibitions.

The V.A.V. Gallery, devoted to work by undergraduate students in the visual arts programmes of the Faculty of Fine Arts, is located on the main floor of the Visual Arts Building at the corner of René-Lévesque Boulevard and Crescent Street. In the Bourget Building on Mountain Street, exhibitions of work by Fine Arts graduate students are presented in the gallery on the main floor.

Theatre, Music and Arts Studios

The Faculty of Fine Arts operates several performing arts facilities on the Loyola Campus, including a state-of-the-art concert hall, seating 600, and the Joseph P. Cazalet Studio, a flexible teaching facility serving theatre students. Dramatic productions on the Sir George Williams Campus are staged in the D.B. Clarke Theatre, a well equipped 380-seat facility in the Henry F. Hall Building.

Specialized studios and workshops for undergraduate and graduate students in the visual arts are located in the Visual Arts Building and the MF Annex.

Music students use ensemble rooms and practice studios in the Refectory Building on the Loyola Campus. Performances are given in the large ensemble rooms and in the Concert Hall. Dance and theatre students use studios in the TJ Annex, located on the Loyola Campus.

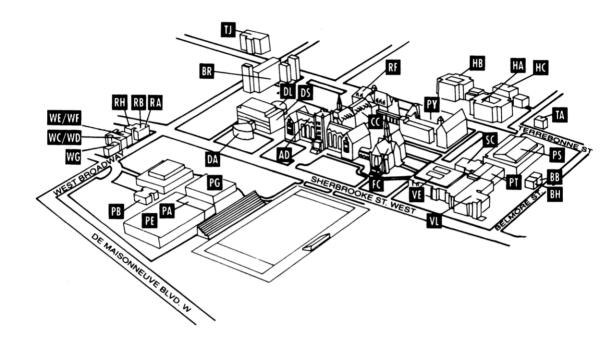
Film

Concordia University houses an impressive collection of films of historic and cultural value.

Athletic Facilities

The University offers extensive programmes for participation in intramural and intercollegiate sports. Facilities include several full-sized playing fields and a fully-equipped physical education centre on the Loyola Campus. The centre includes a gymnasium and an ice arena, as well as training and sports medicine areas, an activities room and a weight-training room.

Concordia University Loyola Campus



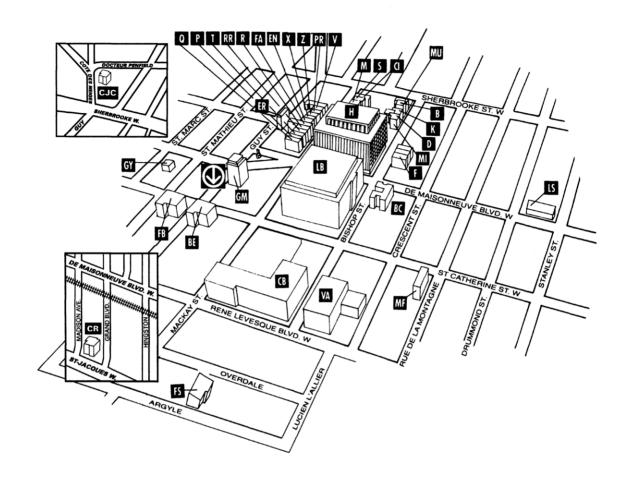
Loyola Campus — (H4B 1R6)

- AD 7141 Sherbrooke W. (Administration Building)
- BB 3502 Belmore Ave
- BH 3500 Belmore Ave (Belmore House)
- BR 7141 Sherbrooke W. (Bryan Building)
- CC 7141 Sherbrooke W. (Central Building)
- DA 7141 Sherbrooke W. (Drummond Auditorium)
- 7141 Sherbrooke W. (Russell Breen Senate Chamber)
- DS 7141 Sherbrooke W. (Drummond Science)

- FC 7141 Sherbrooke W. (F.C. Smith Auditorium)
- HA 7141 Sherbrooke W. (Hingston Hall - A)
- HB 7141 Sherbrooke W. (Hingston Hall - B)
- HC 7141 Sherbrooke W. (Hingston Hall C)
- PA 7200 Sherbrooke W. (Athletics Complex)
- PB 7200 Sherbrooke W. (Athletics Boiler Room)
- PE 7200 Sherbrooke W. (Athletics Rink)

- PG 7200 Sherbrooke W. (Athletics Gym)
- PS 7141 Sherbrooke W. (Physical Services Building)
- PT 7141 Sherbrooke W. (Oscar Peterson Concert Hall)
- PY 7141 Sherbrooke W. (Psychology Building)
- RA 7300 Sherbrooke W.
- **RB** 7302 Sherbrooke W.
- RF 7141 Sherbrooke W. (Refectory Building)
- RH 7312 Sherbrooke W.

- SC 7141 Sherbrooke W. (Campus Centre)
- TA 7079 Terrebonne
- TJ 7315 Terrebonne
- VE 7141 Sherbrooke W. (Vanier Extension)
- VL 7141 Sherbrooke W. (Vanier Library)
- WC 2490 West Broadway
- WD 2492 West Broadway
- WE 2494 West Broadway
- WF 2496 West Broadway
- WG 2480 West Broadway



Sir George Williams Campus — (H3G 1M8)

В	2160	Bishop
DΛ	4.400	Diahaa

BC 1463 Bishop (Bishop Court Administration)

BE 1257 Guy

CB 1425 René-Lévesque Blvd W.

CI 2149 Mackay

CJC 1590 Docteur Penfield

CR 6277 St. Jacques W. (CONCAVE Research Centre)

D 2140 Bishop

EN 2070 Mackay

ER 2155 Guy

F 2085 Bishop

FA 2060 Mackay

FB 1250 Guy (Faubourg)

FS 1438 Overdale

GM 1550 de Maisonneuve Blvd W.

GY 1822 de Maisonneuve Blvd W. (Victoria School Gym)

H 1455 de Maisonneuve Blvd W. (Hall Building)

K 2150 Bishop

LB 1400 de Maisonneuve Blvd W. (J.W. McConnell/Webster Library)

LS 2015 Drummond (Classrooms)

M 2135 Mackay

MF 1230 de la Montagne (Académie Bourget) MI 2130 Bishop

MU 2170 Bishop

P 2020 Mackay PR 2100 Mackay

Q 2010 Mackay

R 2050 Mackay

RR 2040 Mackay

S 2145 Mackay T 2030 Mackay

V 2110 Mackay

VA 1395 René-Lévesque Blvd W. (Visual Arts Building)

X 2080 Mackay

Z 2090 Mackay

Gender Neutral Degree Nomenclature

In February 1992, Concordia University adopted a policy on degree nomenclature that seeks to provide students with the opportunity to graduate with gender neutral degree titles. This policy stipulates that students are entitled to receive their degrees in either the traditional or new degree nomenclature. The new names for degrees are: Baccalaureate, Magisteriate, and Doctorate. The traditional nomenclature is: Bachelor, Master, and Doctor.

The decision to implement new titles arose from the belief that some of the structures that presently exist at Concordia and other universities reflect a period when women were not accepted as full participants in the academic community. The University felt it was time to offer degree titles that do not refer explicitly or implicitly only to men.

As of June 1994, students may choose to graduate with degree titles that are gender neutral and refer to the diplomas themselves. Graduates who have previously been awarded a Concordia degree will be able to request that their degree be re-issued in the new nomenclature.

ACADEMIC CALENDAR

11

ACADEMIC CALENDAR

The Academic Calendar is subject to change. Updated information will be available from the Birks Student Service Centre. For dates pertaining to registration and final examinations please consult the relevant class schedule or the Birks Student Service Centre. For financial deadlines see §15. Concordia University recognizes and respects the religious beliefs, observances and obligations of all faiths. For the information of instructors planning assignment deadlines, class tests, etc., and for persons scheduling meetings, the dates of Holy Days of major religions are available at the Birks Student Service Centre.

Deadlines falling on weekends* or holidays will be extended to the next working day. *Except for academic withdrawal deadlines.

Regular Session — 2000-2001

	2000		
MARCH	Wednesday, March 1	Last day for application to undergraduate programmes — Full-time Regular Session 2000-01.	
	Friday, March 3	University Writing Test.	
	Tuesday, March 7	Last day for academic withdrawal from two-term and winter-term courses.	
APRIL	Monday, April 3	Last day for instructor-scheduled tests or examinations.	
	Monday, April 10	Last day of classes — Regular Session 1999-2000.	
	Wednesday, April 12	Examinations begin.	
	Friday, April 21	University closed.	
	Saturday, April 22	University closed.	
	Monday, April 24	University closed.	
MAY	Sunday, May 7	Examinations end.	
	Friday, May 12	University Writing Test.	
	Monday, May 15	Last day to apply for late completion of courses ending in April 2000.	
	Monday, May 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in April 2000.	
	Tuesday, May 30	Last day for submission of late-completion work for courses ending in April 2000 (application deadline May 15).	
JUNE	Friday, June 2 Monday, June 5 Wednesday, June 7 Wednesday, June 7	Spring Convocations: Faculty of Commerce and Administration Faculty of Arts and Science Faculty of Engineering and Computer Science Faculty of Fine Arts.	
	Thursday, June 15	Last day to apply for supplemental examinations for courses taken during the Regular Session 1999-2000.	
	Thursday, lune 45	Look doubte annie for an evaluation of sources anding in April 2000	

Last day to apply for re-evaluation of courses ending in April 2000.

Thursday, June 15

JULY	Saturday, July 15	Last day to apply for degrees, diplomas and certificates for Fall 2000 graduation.
AUGUST	Wednesday, August 23	Replacement and supplemental examinations begin — Regular Session 1999-2000.
	Tuesday, August 29	Replacement and supplemental examinations end — Regular Session 1999-2000.
	Thursday, August 31	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses taken during the Summer Session 2000.
SEPTEMBER	Friday, September 1	Last day to apply for late completion of courses taken during the Summer Session 2000.
	Monday, September 4	Labour Day — University closed.
	Tuesday, September 5	Classes begin — Day and Evening Regular Session.
	Wednesday, September 13	Last day to add two-term and fall-term courses.
	Friday, September 15	Last day for submission of late-completion work for Summer Session 2000 courses (application deadline September 1).
	Monday, September 18	Last day to apply for supplemental examinations for courses taken during the Summer Session 2000.
	Tuesday, September 19	Deadline for withdrawal with tuition refund from two-term and fall-term courses.
OCTOBER	Sunday, October 1	Last day to apply for re-evaluation of courses taken during the Summer Session 2000.
	Friday, October 6	University Writing Test.
	Saturday, October 7	Replacement and supplemental examinations for Summer Session 2000 courses.
	Monday, October 9	Thanksgiving Day — University closed (see December 5, 2000).
NOVEMBER	Wednesday, November 1	Last day for application to undergraduate programmes — Winter Term 2001.
	Wednesday, November 1	Last day for academic withdrawal from fall-term courses.
	Thursday, November 16	Fall Convocation.
	Monday, November 27	Last day for instructor-scheduled tests or examinations.
DECEMBER	Monday, December 4	Last day of classes — Fall Term.
	Tuesday, December 5	Make-up day for classes scheduled on Monday, October 9 — Instructors must contact Scheduling Office to book a classroom.
	Wednesday, December 6	Examinations begin.
	Friday, December 22	Examinations end.
	2001	
JANUARY	Thursday, January 4	Classes begin — Day and Evening Winter Term.
	Friday, January 12	Last day to add winter-term courses.
	Friday, January 12	University Writing Test.

	Monday, January 15	Last day to apply for degrees, diplomas and certificates for Spring 2001 graduation.
	Monday, January 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in December 2000.
	Thursday, January 18	Deadline for withdrawal with tuition refund from winter-term courses.
FEBRUARY	Thursday, February 1	Last day to apply for supplemental examinations for courses ending in December 2000 (graduating students only).
	Thursday, February 1	Last day to apply for re-evaluation of courses ending in December 2000.
	Thursday, February 1	Last day to apply for late completion of courses ending in December 2000.
	Thursday, February 15	Last day for submission of late-completion work for courses ending in December 2000 (application deadline February 1).
	Monday, February 19	Mid-term break begins.
	Monday, February 19	Replacement examinations begin.
	Monday, February 19	Supplemental examinations begin for courses ending in December 2000 (graduating students only).
	Thursday, February 22	Replacement and supplemental examinations end.
	Friday, February 23	Rector's Holiday — University closed.
	Saturday, February 24	Mid-term break ends.
MARCH	Thursday, March 1	Last day for application to undergraduate programmes — Full-time Regular Session 2001-02.
	Friday, March 2	University Writing Test.
	Friday, March 9	Last day for academic withdrawal from two-term and winter-term courses.
APRIL	Wednesday, April 4	Last day for instructor-scheduled tests or examinations.
	Wednesday, April 11	Last day of classes — Regular Session 2000-01.
	Friday, April 13	University closed.
	Saturday, April 14	University closed.
	Monday, April 16	University closed.
	Tuesday, April 17	Examinations begin.
MAY	Sunday, May 6	Examinations end.
	Friday, May 11	University Writing Test.
	Tuesday, May 15	Last day to apply for late completion of courses ending in April 2001.
	Tuesday, May 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in April 2001.
	Wednesday, May 30	Last day for submission of late-completion work for courses ending in April 2001 (application deadline May 15).

JUNE	Friday, June 15	Last day to apply for supplemental examinations for courses taken during the Regular Session 2000-01.		
	Friday, June 15	Last day to apply for re-evaluation of courses ending in April 2001.		
	T.B.A.	Spring Convocations.		
	Summer Session — 2000 (Day and Evening Classes)			
		lard term dates but there are some courses offered on different he 2000-01 Undergraduate Class Schedule for details.		
MAY	Monday, May 8	Two-term and first-term Summer Session begins.		
	Monday, May 22	Victoria Day — University closed.		
JUNE	Wednesday, June 21	Last day of classes — First-term Summer Session.		
	Thursday, June 22	Examinations begin — Mid-term and first-term finals.		
	Friday, June 23	Fête Nationale — University closed.		
	Thursday, June 29	Examinations end.		
	Friday, June 30	Canada Day — University closed.		
JULY	Monday, July 3	Classes begin — Second-term Summer Session.		
AUGUST	Tuesday, August 15	Last day of classes for two-term and second-term Summer Session.		
	Wednesday, August 16	Examinations begin — Two-term and second-term finals.		
	Tuesday, August 22	Examinations end.		
	Special Six-Week Summer	r Session — 2000 (Day Classes Only)		
JULY	Monday, July 3	Session begins.		
AUGUST	Friday, August 11	Session ends.		

ADMINISTRATION

12

ADMINISTRATION

The following information was updated as of October 1, 1999.

Board of Governors

Eric H. Molson. Chancellor

Frederick H. Lowy, Rector and Vice-Chancellor

Lillian Vineberg, *Interim Chair* Richard J. Renaud, *Vice-Chairman* John E. Parisella, *Vice-Chairman*

Steven H. Appelbaum
Barbara Barclay
Joanne Beaudoin
Francesco Bellini
Alain Benedetti
Deepak Boojhawon
William P. Byers
Alexander J. Carpini
Charles G. Cavell
June S. Chaikelson
Rita Lc de Santis
Marianne Donaldson
Leonard Ellen
Terrill Fancott

Nicole Fauré

Leo Goldfarb
Ned Goodman
Rob Green
George M. Hanna
Peter Howlett
Paul Ivanier
Christine Jourdan
Martin Kapustianyk
Paul T. Kefalas
Ronald E. Lawless
Christine Lengvari
Hazel Mah

Sister Eileen McIlwaine
L. Jacques Ménard
Chris Piché
Miriam Roland
Elizabeth J. Saccá
Sabrina Stea
Jonathan Wener

Senate

John W. O'Brien, Speaker Amely Jurgenliemk, Secretary

Asim J. Al-Khalili Mohsen Anvari Clarence S. Bayne Claude Bédard Abdel Beedassy Liliana Berezowsky Patrice Blais Donald L. Boisvert William P. Byers John A. Capobianco Malcolm Coker Claire G. Cupples William M. Curran Marcel Danis Charles Emond Larry English M. Nabil Esmail J. Charles Giguère Suresh Kumar Goyal Rob Green

Philip Ilijevski Ian Irvine

Christopher Jackson Tom Keefer Jack N. Lightstone Frederick H. Lowy, *Rector*

A. Mojaddidi Mistie Mullarkey Leopold Plotek

Hormoz B. Poorooshasb Lynne Prendergast Marika Pruska-Carrol Peter Rist

Lindsey Scully
William R. Sellers
Martin Singer
Randy B. Swedburg
Patricia A. Thornton
Jerry Tomberlin
Reeta C. Tremblay
Catherine Vallejo
John Woodrow

Council of the Faculty of Arts and Science

Martin Singer, *Dean and Chair* Barbara Harris, *Secretary*

Robert M. Roy, Vice-Dean, Academic

William Knitter, Vice-Dean, Administrative Affairs Dennis Murphy, Vice-Dean, External Relations Frances Shaver, Vice-Dean, Student Affairs

Martin Allor Clarence S. Bayne Peter H. Bird

Aliya Haer

Joanna Bottenberg Pamela Bright William Bukowski William P. Byers Terence Byrnes John A. Capobianco J. David Cheeke Murray C. Clarke Rosemary Drage Hale Daphne Fairbairn
Geoffrey C. Fidler
Michael Gasher
Margaret Gourlay
Joel Hillel
Dubravka Kapa
Robert D. Kilgour
Lucie Lequin
Jack N. Lightstone
Frederick H. Lowy, *Rector*

Chris Mota Leslie Orr Brigitte St. Laurent-Taddeo

Daniel Salée

Stephen J. Scheinberg Richard F. Schmid V. Alex Sharma Randy B. Swedburg Anthony J. Synnott Patricia A. Thornton

Terry Too Reeta C. Tremblay Catherine Vallejo

Harry J. Zarins

Council of the Faculty of Commerce and Administration

Mohsen Anvari, Chair C. Derek Acland Arshad Ahmad Kamal Argheyd Clarence S. Bayne Claude Bédard Marcel Belanger Geoffrev Bell Sandra Betton Harjeet Bhabra Matthew Bogue Julie Boilard Deepak Boojhawon Martin Crawford Jamshid Etezadi-Amoli Frough Tavanayan Far Bayram Zeki Gidengil Suresh Kumar Goyal John Hall A. Bakr Ibrahim

George K. Kanaan

Christos Katsafados

M. Nabil Esmail, Chair

Lea Prevel Katsanis Dennis Kira Jack N. Lightstone Frederick H. Lowy, Rector Graham Martin Jean McGuire Danielle Morin Denise Mpekios Martha Nandorfy Martin Nigro Robert J. Oppenheimer Peter Regimbald Wendy Nadine Roscoe Christopher A. Ross Rabih Sebaaly Juan J. Segovia Mahesh Sharma Maureen Sterling Lorne Switzer

Council of the Faculty of Engineering and Computer Science

Clara Paradisis, Secretary M. Omair Ahmad Andreas K. Athienitis Jamie Baxter Rama B. Bhat Bipin Desai Terrill Fancott Rajamohan Ganesan Wahid S. Ghaly J. Charles Giguère Gerard J. Gouw Gosta K. Grahne Fariborz Haghighat Lee Harris Jeremiah F. Hayes Van Suong Hoa James E. Jans Iffat Kazim

Khashayar Khorasani John Kopanas Clement Lam Hon Fung Li Jack N. Lightstone Hao Liu

Jerry Tomberlin

John Woodrow

Frederick H. Lowy, Rector Osama Moselhi Jaroslav Opatrny Christopher Piche Eugene I. Plotkin Amruthur S. Ramamurthy Peter Regimbald Anik St-Hilaire Jaroslav V. Svoboda Christopher W. Trueman

Yun Wang

Radu Grigore Zmeureanu

Council of the Faculty of Fine Arts

Christopher Jackson, Chair Shirley McLeod, Secretary Lynda Hyette, Interim Secretary Joan Acland

Joan Acland Lorrie Blair Judith Cezar Mark Corwin Penelope Cousineau-Levine Rosemary Drage Hale Anne Dunlop Rod Ellias Andrea Fairchild Kit Griffin Harlan Johnson

Richard Lachapelle Sandra Paikowsky Barbara Layne Kathleen Perry Leland Peterson Loren Lerner Jack N. Lightstone Peter Regimbald John W. Locke Melinda Reinhart Frederick H. Lowy, Rector Peter Rist Eric Mongerson Lydia Sharman Michael Montanaro Roger Tyrrell Kat O'Brien David Vivian Donald L. Boisvert, Chair Claude Jacob Concordia Council James E. Jans Jane Hackett, Secretary on Student Life Abdel Beedassy Ann Kerby Robert Boncore Lina Lipscombe Claudie Boujaklian Robert MacIver Jenny Calder Sheryll Navidad Roger Côté Dwayne Prejli William M. Curran Tiffany Ryan Melanie Drew Frances Shaver Victor Francisco Karen Stewart Sabine Friesinger Peter Taylor Patrick Gilmore Lorraine Toscano Sup Mei Graub Ann Vroom Katherine Hedrich Harry J. Zarins Officers of the RECTOR AND VICE-CHANCELLOR: ACTING OMBUDSPERSON: Administration Frederick H. Lowy, BA, MD, CM, O.C. Sally Spilhaus, BA ASSISTANT TO THE RECTOR: ADVISOR, RIGHTS AND RESPONSIBILITIES: Office of the Rector Enza De Cubellis, BA Sally Spilhaus, BA DIRECTOR, INTERNAL AUDIT: EXECUTIVE DIRECTOR OF RECRUITMENT: Ted Nowak, BComm, CMA, CGA Ann Vroom, BA RECTOR AND VICE-CHANCELLOR: VICE-RECTOR, SERVICES: Rector's Consolidated Charles Emond, BSc, MBA Frederick H. Lowy, BA, MD, CM, O.C. Cabinet PROVOST AND VICE-RECTOR, RESEARCH: **EXECUTIVE DIRECTOR:** Jack N. Lightstone, BA, MA, PhD Garry L. Milton, BA OFFICE ADMINISTRATOR: COORDINATOR, QUALITY PROGRAMMES: Pina Greco David Gobby, BA VICE-RECTOR, INSTITUTIONAL RELATIONS SENIOR PLANNING AND POLICY ANALYST: AND SECRETARY-GENERAL: Cameron Tilson, BSc Marcel Danis, BA, MA, LLL ASSISTANT TO THE RECTOR, PROTOCOL CHIEF FINANCIAL OFFICER: AND SPECIAL EVENTS: Larry English, BComm, CA Vacant PROVOST AND VICE-RECTOR, RESEARCH: DEAN, COMMERCE AND ADMINISTRATION: Office of the Provost Jack N. Lightstone, BA, MA, PhD Mohsen Anvari, BEng, MBA, MA, PhD and Vice-Rector, ASSISTANT TO THE PROVOST AND ASSOCIATE DEAN, ADMINISTRATIVE Research VICE-RECTOR, RESEARCH: AFFAIRS AND HUMAN RESOURCES: Angela Wilson Wright A. Bakr Ibrahim, BComm, MBA, PhD, CA, DEAN, ARTS AND SCIENCE: RIA/CMA Martin Singer, BA, MA, PhD ASSOCIATE DEAN, UNDERGRADUATE VICE-DEAN, ADMINISTRATIVE AFFAIRS: PROGRAMMES, ACADEMIC AND William Knitter, BA, PhD STUDENT AFFAIRS: VICE-DEAN, EXTERNAL RELATIONS: Danielle Morin, BSc, MSc, PhD Dennis Murphy, BA, MA, PhD ASSOCIATE DEAN, EXTERNAL VICE-DEAN, ACADEMIC: Robert M. Roy, BSc, MA, PhD AFFAIRS AND EXECUTIVE VICE-DEAN, STUDENT AFFAIRS: PROGRAMMES:

Frances Shaver, BA, MA, PhD

Jerry Tomberlin, BS, MPH, AM, PhD

ASSOCIATE DEAN, GRADUATE DEAN OF GRADUATE STUDIES AND PROGRAMMES, RESEARCH AND RESEARCH - SCHOOL OF GRADUATE PROGRAMME EVALUATION: STUDIES: Jean McGuire, BA, MS, PhD Claude Bédard, BScA, MSc, PhD DEAN, ENGINEERING AND COMPUTER ASSOCIATE DEAN, APPRAISALS AND SCIENCE: INTERDISCIPLINARY STUDIES: M. Nabil Esmail, BScMechEng, MSc(Mech Eng), Rosemary Drage Hale, BA, MS, MA, MTS, PhD, FCIC, PEng ASSOCIATE DEAN, UNDERGRADUATE ASSOCIATE DEAN, STUDENT AFFAIRS PROGRAMMES AND STUDENT AFFAIRS: AND CURRICULUM: Terrill Fancott, BEng, MSc, DSc James E. Jans, BA, MA, PhD ASSOCIATE DEAN, GRADUATE DIRECTOR, RESEARCH SERVICES: PROGRAMMES AND RESEARCH: Erica M. Besso, BSc, PhD Rama B. Bhat, BEng, MTech, PhD DIRECTOR, CENTRE FOR MATURE ASSOCIATE DEAN, INSTRUCTIONAL STUDENTS: AFFAIRS: T.B.A. Khashayar Khorasani, BSc, MSc, PhD DIRECTOR, CENTRE FOR INTERNATIONAL DEAN, FINE ARTS: ACADEMIC COOPERATION: Christopher Jackson, Dip. Premier Prix, Balbir S. Sahni, MA, MBA, PhD Conservatoire de Musique de Montréal DIRECTOR, CONTINUING EDUCATION: ASSOCIATE DEAN, SPACE PLANNING: T.B.A. John W. Locke, BA, MA PRINCIPAL, INSTITUTE FOR CO-OPERATIVE ASSOCIATE DEAN, RESEARCH AND **EDUCATION:** TECHNOLOGY: Graham Martin, BSc, MSc, Ing Barbara Layne, BFA, MFA DIRECTOR, CENTRE FOR TEACHING AND ASSOCIATE DEAN, ACADEMIC LEARNING SERVICES: AFFAIRS: Olivia Rovinescu, BEd, MA Andrea Fairchild, BA, BEd, MA, PhD DIRECTOR, INSTITUTIONAL RESEARCH: ASSOCIATE DEAN, RESOURCES AND Lise Tremblay, BA, MA, MSc **DEVELOPMENT:** DIRECTOR, UNIVERSITY LIBRARIES: Kathleen Perry, BA, MLS William M. Curran, BA, MEd, MLS

Office of the Vice-Rector, Institutional Relations and Secretary-General

VICE-RECTOR, INSTITUTIONAL RELATIONS AND SECRETARY-GENERAL:

Marcel Danis, BA, MA, LLL

EXECUTIVE ASSISTANT TO THE VICE-RECTOR AND SECRETARY-GENERAL:

Diane Hastings

EXECUTIVE DIRECTOR OF ADVANCEMENT:

Tamás M. Zsolnay, BA, CFRE

ACTING DIRECTOR, ALUMNI AFFAIRS:

Gabrielle Korn, BA

EXECUTIVE DIRECTOR, COMMUNICATIONS:

Maria Paradiso, BSc, MBA

DIRECTOR, MARKETING COMMUNICATIONS:

Sandra Spina, BA

EXECUTIVE DIRECTOR, HUMAN RESOURCES:

Valérie Gagnon, BA

DIRECTOR, PUBLIC RELATIONS:

Laurie Zack, BA

DIRECTOR, ACADEMIC INSTITUTIONAL

RELATIONS: Joy Bennett, BA, MA, MLS

DIRECTOR, GOVERNMENT RELATIONS AND

EXTERNAL AFFAIRS: Marie-Andrée Robitaille, BA

SECRETARY OF THE BOARD OF GOVERNORS AND OF SENATE:

Amely Jurgenliemk, BA, MA SENIOR LEGAL COUNSEL: Bram Freedman, BA, LLB, BCL

DIRECTOR OF ARCHIVES:

Nancy Marrelli, BA **DIRECTOR OF EQUITY PROGRAMMES:**

Nicole Saltiel, BA

DIRECTOR, EMPLOYEE RELATIONS:

Gilles Bourgeois, BA, MA

Office of the Vice-Rector, Services

VICE-RECTOR, SERVICES: Charles Emond, BSc, MBA **EXECUTIVE ASSISTANT TO THE** VICE-RECTOR: Jackie Chegrinec UNIVERSITY REGISTRAR: Lynne Prendergast, BSc, BA, MBA DIRECTOR, BOOKSTORES AND COMPUTER STORE: Lina Lipscombe

DIRECTOR, INSTRUCTIONAL AND INFORMATION TECHNOLOGY SERVICES: John Woodrow, BSc DIRECTOR, RECREATION AND ATHLETICS: Harry J. Zarins, BEd, MEd ACTING INTERIM DIRECTOR, SECURITY: Paul Aubé DIRECTOR, ENVIRONMENTAL HEALTH AND SAFETY: Susan Magor, RN, BA, DIP Occ Health, MSCA

EXECUTIVE DIRECTOR, PHYSICAL

RESOURCES:

Michael Di Grappa, BA, MPA

DIRECTOR, FACILITIES PLANNING AND

DEVELOPMENT: Martine Lehoux, BArch DIRECTOR, MAINTENANCE

OPERATIONS: Richard Young

DIRECTOR, UTILITIES AND ENERGY

CONSERVATION: Yves Gilbert, BScMechEng DEAN OF STUDENTS:

Donald L. Boisvert, BA, MA, PhD

DIRECTOR, ADVOCACY AND SUPPORT

SERVICES: Ann Kerby

DIRECTOR, COUNSELLING AND

DEVELOPMENT:

Sup Mei Graub, BA, MA, DEd DIRECTOR, SOCIO-ECONOMIC

SERVICES: Roger Côté, BA

DIRECTOR, HEALTH SERVICES: Melanie Drew, BSc, MScA

ADMISSION REGULATIONS

13.1	ADMISSION TO CONCORDIA UNIVERSITY
13.2	DEFINITIONS
13.3	ADMISSION REQUIREMENTS 13.3.1 Applicants from Québec Institutions 13.3.2 Applicants from Other Canadian Provinces 13.3.3 Transfers from Other Universities 13.3.4 Transfers from Other Post-Secondary Institutions 13.3.5 Pro-Tanto Credits and Exemptions 13.3.6 Applicants from Outside Canada 13.3.7 Former Concordia Students
13.4	LANGUAGE PROFICIENCY
13.5	APPLYING FOR ADMISSION 13.5.1 Application Fee 13.5.2 Deadlines
13.6	SPECIAL ADMISSIONS 13.6.1 Mature Students 13.6.2 Visiting Students 13.6.3 Independent Students 13.6.4 International Applicants to Commerce and Administration
13.7	REQUIRED DOCUMENTS 13.7.1 All Applicants 13.7.2 Cégep Applicants
13.8	SELECTION PROCESS AND NOTIFICATION 13.8.1 Conditional Admission 13.8.2 Admission Deposit 13.8.3 Registration

13

ADMISSION REGULATIONS

University Registrar
LYNNE PRENDERGAST
Administrative Assistant
HUGUETTE ALBERT
Enrolment Officer
TERESA ZUCCARO
Admissions Coordinator
ASSUNTA FARGNOLI
Enrolment Officer -

Montréal Black Community DAVE A. MCKENZIE Manager - Support Services

LINDA HEALEY

Assistant Registrar BRUCE MACKENZIE

Assistant Registrar TERRY TOO Assistant Registrar PETER REGIMBALD

Admissions Counsellor

JOYCELYN WEATHERSPOON-JONES Admissions Counsellors - Arts and Science

VIRGINIA BOWKER ILZE KRAULIS GLEN THOMAS HEIDI WIEDEMANN

Admissions Counsellors - Commerce and

Administration MARY LALIOTIS DANIELLE PULLEN

Admissions Counsellors - Engineering and

Computer Science CHRISTINE CHAN NANNETTE PLANT

Admissions Counsellor - Fine Arts

CATHERINE HIRST

Location

Sir George Williams Campus Birks Student Service Centre J.W. McConnell Building, Room: LB 185 (514) 848-2668

Fax: (514) 848-2621

E-Mail: admreg@alcor.concordia.ca University Web Site: http://www.concordia.ca

13.1 ADMISSION TO CONCORDIA UNIVERSITY

The University gives fair consideration to all applicants and informs them of its decisions and the basis for such decisions within a reasonable period of time. Concordia has a long tradition of service to adult and part-time students. Basic information on admission requirements and procedures is included in this Calendar. More detailed information can be found in the Admissions Guide and at the Concordia Web Site.

In keeping with general principles accepted by Québec universities, admission to Concordia University is open to qualified applicants in the programme of their choice. In programmes with limited enrolments, not all qualified applicants can be accepted. In such cases, the University accepts those with the strongest qualifications and demonstrable potential. Qualified applicants not admitted to their preferred programme are immediately considered for their second-choice programme.

The University maintains a Student Service Centre on the Sir George Williams Campus where application forms as well as information about requirements and procedures are available. There is a single processing centre to which all applications and supporting documents should be mailed:

Concordia University Admissions Application Centre P.O. Box 2900 Montréal, Québec H3G 2S2

It is also possible to submit an application through the Concordia Web Site: http://www.concordia.ca

13.2 **DEFINITIONS**

The Academic Year

The Academic Year begins with a Summer Session (May to August) followed by a Regular Session (September to April). The Summer Session includes all courses offered between the beginning of May and the end of August. The Regular Session is divided into a Fall Term (September-December) and a Winter Term (January-April), each 15 weeks long. Terms include an examination period, during which any final examination must be held. The Academic Calendar §11 lists precise dates for the beginning and end of classes and examination periods.

Exemption

A student may be exempted from a Concordia course based on previous study or a challenge exam. An exemption from a course has no credit value towards a degree. Exemptions from required courses may be granted in cases where students have already covered the work at any institution with an appropriate level of performance. Any such courses must be replaced with courses chosen in consultation with their advisers.

Extended Credit Programme Students

Students registered in an extended programme, normally requiring 30 credits in addition to the regular requirements, designed for students entering from secondary institutions outside Québec. (See relevant Faculty section).

Independent Students

Students not seeking a degree or Certificate.

Mature Students

Undergraduate students who do not meet regular academic admission requirements and have been admitted on the basis of their age, experience, and potential.

Pro-Tanto Credits

Pro-tanto credits are credits for courses taken at another institution (or in another Concordia programme) which may be transferred towards a Concordia degree.

Residence Requirement

The minimum number of credits which must be taken at Concordia University to obtain a degree or Certificate awarded by the University.

Undergraduate Students

Students registered in an undergraduate degree or Certificate programme, whether on a full-time or part-time basis. See §16.1.2 for a definition of full-time and part-time study.

Visiting Students

Undergraduate students from other universities who have written approval from their home university to take courses at Concordia University, or students currently registered in certain Certificate programmes sponsored by external associations (e.g. programmes in the Faculty of Commerce and Administration).

13.3 ADMISSION REQUIREMENTS

13.3.1 Applicants from Québec Institutions Québec applicants must have successfully completed a two-year pre-university programme in a cégep and qualify for a Diploma of Collegial Studies (DEC) or the equivalent. Applicants who have completed a three-year professional programme in a cégep or have obtained a French or International Baccalaureate are also eligible for consideration.

Cégep records of applicants must include the successfully completed prerequisites of the Concordia degree programme for which they are applying. These programmes and admission requirements "profiles" are listed in:

- The Department of Education booklet "Accueil Structures d'accueil aux études universitaires de premier cycle",
- The programmes and admission requirements listed under each Faculty section,
- The Admissions Guide,
- The Concordia Web Site.

Students admitted to a particular programme at the University and who subsequently wish to change to another programme may have to complete specific prerequisites in addition to their regular programme requirements.

13.3.2 Applicants from Other Canadian Provinces Graduates of secondary schools in Canadian provinces and territories other than Québec are considered for admission to the Extended Credit Programme (ECP) at Concordia. The ECP requires completion of 30 credits in addition to the regular requirements. The duration of a degree programme is normally four years. The BEng degree, the BA, Early Childhood and Elementary Education Programme, the BEd, TESL and the BFA, Art Education will generally require five years of full-time study to complete.

To be considered for admission, students must have a minimum overall average of 65% in academic subjects taken in the final year of secondary school, and should have senior high school course

credits appropriate to the degree programme for which they are applying. Higher averages may be required for admission to certain programmes in which the demand for places by qualified applicants exceeds the number of places available.

Students completing the following levels of education may be considered for entry to the Extended Credit Programme.

Ontario

Applicants from Ontario must present the Ontario Secondary School Diploma (OSSD) with a minimum overall average of 65% in six appropriate Ontario Academic Courses (OACs). Students entering programmes in either the Faculty of Arts and Science or the Faculty of Fine Arts are awarded six credits each (to a maximum of 30 credits) for OAC courses in the humanities or social sciences (as defined by Concordia University) completed with grades of 70% or over. The policy regarding the awarding of credits is subject to review on an annual basis.

Other Provinces

Applicants from all other provinces and territories must have successfully completed Grade 12.

13.3.3 Transfers from Other Universities

Each transfer application is considered on its merits. The number of transfer credits granted depends on the character, quality, and quantity of the work completed at the accredited institution. In allowing transfer credits, some special conditions apply:

- 1. Students will not be given credit for courses taken in another university during the same academic term in which they have registered for courses at Concordia University, unless special permission has been obtained in advance from this University. The Office of the Registrar should be contacted for information on the correct procedure.
- 2. To earn an undergraduate degree, students must take a minimum of 45 credits at Concordia University. These should be the last 45 credits. The BEng, the BA (Early Childhood and Elementary Education), the BEd (TESL), and the BFA (Art Education) require 60 credits at Concordia.
- 3. Students transferring to Concordia after having failed to achieve a satisfactory record at any university must take a minimum of 60 additional credits at Concordia.
- 4. At least 50% of the degree credits for Honours, Specializations, Majors, or Minors must be taken at Concordia. Individual Faculties determine the precise proportion.

Further detailed information is available in §16.1.3 and §16.1.7 of this Calendar.

1334 Transfers from Other Post-Secondary Institutions

Each transfer application is considered on its merits. Credits from junior colleges, community colleges, or colleges of applied arts and technology outside Québec will, in general, be given the same recognition towards undergraduate programmes as they receive in their respective provinces.

13.3.5 Pro-Tanto Credits and Exemptions

Pro-tanto credits are credits for courses taken at another institution (or in another Concordia programme) which may be transferred towards a Concordia degree. The Office of the Registrar, in consultation with the four Faculties, assesses all requests for pro-tanto credits.

An exemption from a course has no credit value towards a degree. Exemptions from required courses may be granted in cases where students have already covered the work at any institution, with an appropriate level of performance. Any such courses must be replaced with courses chosen in consultation with their advisers.

13.3.6 Applicants from Outside Canada

The academic qualifications required of Canadian students applying from institutions outside Canada are comparable to those required of students applying from within Canada. Non-Canadian applicants from institutions outside Canada should refer to §19.

13.3.7 Former Concordia Students

Former Concordia students who have been absent from Concordia and who did not officially withdraw from the University may be required to submit a new application for admission. Students who, during their absence from Concordia, attended another institution and attempted at least 12 credits, must submit a new application and make arrangements to have an official transcript sent to the Office of the Registrar. Advanced standing will be assessed as part of the admissions process.

Students who, during their absence from Concordia, attended another institution and attempted less than 12 credits, need not submit a new application for admission. They may, however, be eligible for transfer credits for work completed during their absence. The Office of the Registrar, in consultation with the four Faculties, assesses all requests for pro-tanto credits. Further detailed information is available in §13.3.3, §16.1.3 and §16.1.7 of this Calendar.

13.4 LANGUAGE PROFICIENCY

While the language of instruction at Concordia is English, most assignments and examinations may be submitted in French. Students whose first language is neither French nor English must demonstrate language proficiency prior to their admission to Concordia. They will ordinarily be exempt from preadmission English tests if they meet one of the following criteria:

- They hold a Québec Diploma of Collegial Studies (or its equivalent from an English-language school system).
- 2. They have obtained a grade of "C" or better in the GCSE English language examination.
- 3. They have studied for at least three years in an educational institution where the sole language of instruction is English.

If none of these criteria fits, a student whose first language is other than English must write a required English test (see §16.2.4). Only when the Office of the Registrar has received the test results is the student's application to Concordia considered complete.

In all cases, the Office of the Registrar reserves the right to require a proficiency test if it is deemed necessary.

13.5 APPLYING FOR ADMISSION

Application forms are available from the Office of the Registrar. Students may also submit an application through the Concordia Web Site, http://www.concordia.ca. Students should apply for admission as early as possible to allow sufficient time for the evaluation of their applications. This is especially true for applicants from outside Canada. Supporting documents must be submitted at the time of application or as soon afterwards as they become available.

Applicants must state their full academic history on their application for admission or risk cancellation of their acceptance or registration. No transfer credit will be awarded retroactively for former studies not reported in the application.

13.5.1 Application Fee There is a \$50 (Canadian) application fee required with every application, payable to Concordia University by certified cheque, money order, MasterCard, Visa, or debit card (Interac). Applicants from outside Canada may pay this fee by international money order or draft drawn on a Canadian bank in Canadian funds.

This application fee is not refundable under any circumstances, nor can it be used towards tuition. It is not transferable to a session other than that for which the student is applying.

13.5.2 Deadlines September is the normal point of entry to full-time and part-time studies. Entry in January or in the Summer Session is limited to certain programmes. International students who are applying from inside Canada may also be considered for entry in January. Students should refer to the admissions information within the relevant Faculty section, in the Admissions Guide, or on the Concordia Web Site.

Full-Time

March 1 and November 1 are the application deadline dates normally set for the Fall and Winter terms respectively. However, candidates are encouraged to submit their applications well before the start of term to allow sufficient time for evaluation and notification.

Part-Time

The deadlines for applying for Fall and Winter terms are July 1 and November 1 respectively. However, candidates are encouraged to submit their applications well before the start of term to allow sufficient time for evaluation and notification.

Note: Part-time applicants to the Faculty of Fine Arts should apply before March 1. Further information can be obtained from the Office of the Registrar.

13.6 SPECIAL ADMISSIONS

13.6.1 Mature Students Mature students are undergraduates who have not met the regular academic admission requirements (e.g. completion of a DEC or equivalent), but have been admitted on the basis of age, experience, and potential. Mature students may study full-time or part-time.

Information on Mature Entry is contained in §14.

13.6.2 Visiting Students Visiting students are undergraduate students from other universities who have written approval from their home university to take courses at Concordia University, or they are students currently registered in certain Certificate programmes sponsored by external associations. These students may apply for

Visiting student status by contacting the Birks Student Service Centre. The granting of such status in no way guarantees a student a place in a course.

- 1. Undergraduate students from other Québec universities who wish to take courses at Concordia must present the Inter-University Exchange form duly authorized by the home university. Additional information is available in §16.1.7.
- 2. Undergraduate students from other universities outside the province of Québec who wish to take courses at Concordia must submit a letter of permission from the registrar of their home university and Canadian citizenship/permanent residency documents or Québec Certificate of Acceptance (CAQ) and/or student visa. Visiting students who are Canadians or Permanent Residents may be eligible to pay Québec rates of tuition upon submission of proof of Québec residency in accordance with government criteria (see §13.7).
- 3. Students who wish to register in Certificate programmes sponsored by external associations must submit proof of membership in the association and citizenship documents. Visiting students who are Canadians or Permanent Residents may be eligible to pay Québec rates of tuition upon submission of proof of Québec residency in accordance with government criteria (see §13.7).

13.6.3 Independent Students Concordia University allows individuals who are not seeking a degree or Certificate to register as Independent students, if they are Canadian Citizens, Permanent Residents (Landed Immigrants) or holders of a diplomatic visa, and if they satisfy admission requirements. Independent students may register for a maximum of 18 credits a year, equally divided between Fall and Winter terms. They register for courses once all undergraduate students have selected their schedules; their Independent status in no way guarantees them a place in a given course.

There are two categories of Independent student:

- 1. those who meet regular admission requirements.
- 2. those who meet Mature Entry requirements (see §14.3), and satisfy the University that they have the right background for the course(s) for which they wish to register.

Note: Independent students must satisfy the University that they have completed prerequisite courses where required.

Applicants for Independent status should contact the Office of the Registrar. They will be required to submit evidence of having met University entrance requirements and to submit Canadian citizenship/ permanent residency documents (see §13.7). Independent students who are Canadians or Permanent Residents may be eligible to pay Québec rates of tuition upon submission of proof of Québec residency in accordance with government criteria (see §13.7).

Independent students who subsequently wish to enter a degree or Certificate programme must make a formal application to the Office of the Registrar. Credits acquired by Independent students may subsequently be applied towards a degree or Certificate programme, if appropriate. In the case of the Faculty of Arts and Science, an Independent student may be granted a maximum of 30 credits towards a degree.

13.6.4 International Applicants to Commerce and Administration

While the normal entry period for International Students from outside Canada is September, the Faculty of Commerce and Administration also considers them for January admission. The Faculty of Commerce and Administration has implemented a rolling international admissions

process whereby a student whose application becomes complete too late to be considered for a given session will automatically be considered for the next entry date.

NOTE: Visa arrangements can take up to three months after the acceptance letter has been issued to a student. For this reason, students wishing to be considered for January admission are recommended to submit their applications many months in advance.

13.7 REQUIRED DOCUMENTS

Citizenship or Permanent Residency Documents

Canadian Citizens and Permanent Residents (Landed Immigrants) must present proof of their status in Canada. Students who have not provided such evidence are automatically charged international tuition fees. To prove Canadian citizenship or Permanent Resident status, applicants must supply the Office of the Registrar with an original or a legally certified photocopy of one of the following documents:

Canadian birth certificate:

Canadian baptismal certificate (showing place of birth in Canada);

Canadian citizenship or Permanent Resident (IM-1000) papers;

Current Canadian passport.

The following documents are **not** acceptable:

Driver's licence:

Medicare or health insurance card:

Social Insurance Number card.

Proof of Québec Residency

The University will endeavour to establish Québec Residency status for applicants from Québec cégeps by importing province of residence data electronically from government files based on their "code permanent".

Other Canadian Citizens and Permanent Residents (Landed Immigrants) must present proof of Québec residency. Students who have not provided such evidence are automatically charged non-Québec resident fees.

To prove Québec residency, applicants must supply the Office of the Registrar with an original or legally certified photocopy of one of the following documents:

- A birth certificate issued by the Government of Québec before January 1, 1994, whatever the place of birth;
- A birth certificate issued by the Government of Québec on or after January 1, 1994, only if the place of birth is listed as being in Québec;
- A baptismal certificate issued by a parish in Québec before January 1, 1994, whatever the place of birth:
- A current Canadian passport on which the place of birth is clearly listed as being in Québec;
- A Certificat de sélection du Québec (CSQ) or an official letter from le ministère des Communautés culturelles et de l'immigration du Québec attesting that the student is the holder of a CSQ;
- A loan certificate issued by l'Aide financière aux études du ministère de l'Éducation du Québec for the current year.

In addition, the student may fit into one of a number of other approved government categories. The student must submit a signed attestation to the University, on the approved government form, with accompanying documentation that is described on the form.

Among the categories recognized by the Government are:

- A student adopted by a person with residency status in Québec at the time of the adoption;
- A student, one of whose parents resides in Québec;
- A student who has resided in Québec for at least 12 months before becoming a full-time student;
- A student who came to Canada as a Permanent Resident without a Certificat de sélection du Québec (CSQ) but has resided in Québec for at least three months without having lived elsewhere in Canada for more than three months and his or her parents, or guarantor, do not live in another province in Canada;
- A student whose spouse qualifies under these criteria as a Québec Resident.

If, upon acceptance to a regular University programme, proof of Québec residency has not been established, the Office of the Registrar will mail students a blank government form, *Attestation of Residency in Québec*. Visiting and Independent students will be provided with a form at the time they apply for Visiting or Independent status at the Birks Student Service Centre.

13.7.1 All Applicants

Academic Documents

Applicants must submit all secondary and post-secondary academic records. They must ensure that an **official** transcript is forwarded directly to the Admissions Application Centre by all the institutions which they have attended. (Applications will not be considered until an official transcript from EACH institution has been received. These are required even where the student may have earned no credit.)

With their application, students currently enrolled at an institution must include results from all previous terms together with a list of courses in progress. They must arrange for an **official** transcript with the results of the final semester to be forwarded as soon as possible. All documents must be originals or appropriately certified copies. Uncertified copies are not acceptable; neither are records transmitted by fax. Transcripts in a language other than English or French must be accompanied by a notarized translation. If the transcript does not detail the subjects and the grades, a certified statement of these from an authorized official of the institution should also be included.

The above procedure whereby institutions send official transcripts directly to Concordia University is the normal method for receipt of official transcripts. However, in order to accelerate the review of their file, students may submit official transcripts in **sealed envelopes** along with their application, subject to the following procedures: applicants are to request each previous educational institution to provide them with a copy of their official transcript, sealed in an envelope which bears the name and address of the school, the institutional logo (if applicable), a notice on the envelope stating that it contains official transcripts, and a signature/signature stamp/explanatory label placed across the seal of the envelope. The sealed-envelope transcript method may be used only for transcripts issued by institutions in North America.

13.7.2 Cégep Applicants For students who have attended or are currently attending cégep, Concordia University will automatically obtain the required cégep records from CREPUQ (Conférence des recteurs et des principaux des universités du Québec). To prevent delays in the transfer of the cégep records, students must correctly enter their "code permanent" (the educational code number for Québec students) on their application forms.

13.8 SELECTION PROCESS AND NOTIFICATION

13.8.1 Conditional Admission

Applicants seeking admission to undergraduate programmes may be granted conditional acceptance on the basis of available academic records, including interim results for the current year. Final admission is contingent upon a student's successfully completing all the academic admission requirements and meeting all conditions as stated in the letter of conditional acceptance issued by the Office of the Registrar.

13.8.2 Admission Deposit Applicants who have been granted admission or conditional admission to full-time studies or to certain part-time programmes must submit a cheque or money order for \$50 (Canadian) to confirm their intention to enter the University. This non-refundable admission deposit is applied towards tuition fees.

Applicants who receive conditional acceptance, but who are ultimately denied admission because they have not completed the minimum academic requirements for entrance, will receive a refund of their admission deposit.

13.8.3 Registration

Complete information regarding registration is sent to all students with the letter of acceptance.

MATURE ENTRY

14.1	GENERAL INFORMATION
14.2	CENTRE FOR MATURE STUDENTS
14.3	ADMISSION AS A MATURE STUDENT
14.4	PROGRAMME REQUIREMENTS 14.4.1 Faculty of Arts and Science 14.4.2 Faculty of Commerce and Administration 14.4.3 Faculty of Engineering and Computer Scien 14.4.4 Faculty of Fine Arts
14.5	PROGRAMMES OF STUDY FOR SENIOR STUDENT 14.5.1 Senior Scholarships

14

MATURE ENTRY

Director T.B.A.

Associate Director T.B.A.

Mature Student Advisers
BRIGEEN BADOUR
JILL BARRY
ANNE MARIE FERRARI
NELLY TRAKAS

Senior Students Programme Coordinator SYLVIA DE NIVERVILLE

Fellows

JUDY APPLEBY, Head, Information Services, Library

TANNIS ARBUCKLE-MAAG, *Professor, Psychology*

BRYAN BARBIERI, Associate Professor, Marketing

PETER BIRD, Professor, Chemistry and Biochemistry

MICHAEL BRIAN, Associate Professor, English PAMELA BRIGHT, Associate Professor, Theological Studies

MARTHE J. CATRY-VERRON, Adjunct Professor, Études françaises

MURRAY CLARKE, Associate Professor, Philosophy

M. GRAEME DECARIE, Associate Professor, History

RICHARD J. DIUBALDO, *Director, Continuing Education*

ROSEMARY DRAGE HALE, Associate Dean, Graduate Studies

JOEL HILLEL, Professor, Mathematics and Statistics

LYNN HUGHES, Associate Professor, Studio Arts JAMES E. JANS, Associate Dean, Graduate Studies

CORINNE JETTE, Professor, Engineering and Computer Science

BLUMA LITNER, Associate Professor, Applied Human Sciences

SEAN E. MCEVENUE, *Professor, Theological Studies*

JOHN MILLER, Assistant Professor, English
DANIELLE MORIN, Associate Dean, Commerce
and Administration

DAN OTCHERE, Associate Professor, Economics ENN RAUDSEPP, Associate Professor, Journalism

WILLIAM R. SELLERS, Associate Professor, Exercise Science

FRANCES SHAVER, Vice-Dean, Arts and Science

MARTIN SINGER, Dean, Arts and Science RANDY B. SWEDBURG, Associate Professor, Applied Human Sciences

PATRICIA A. THORNTON, Associate Professor, Geography

REETA C. TREMBLAY, Associate Professor, Political Science

Associate Fellows

LESLIE BECSKEI, Academic Programmes Coordinator, Engineering and Computer Science

PERRY CALCE, Assistant to Principal/ Internship Coordinator, School of Community and Public Affairs

DONALD CHAMBERS, Enrolment Manager, Arts and Science

ROGER CÔTÉ, Director, Financial Aid and Awards

ASSUNTA FARGNOLI, Admissions Coordinator, Office of the Registrar RIVA HEFT, Director, Adult Education ANN KERBY, Director, Advocacy and Support Services

LINDA MACDONALD, Student Affairs
Coordinator, Engineering and Computer Science
PERLA MUYAL, Academic Adviser, Fine Arts
MARY O'MALLEY, Learning and Study Skills
Specialist, Counselling and Development
PETER REGIMBALD, Assistant Registrar,
Office of the Registrar
OLIVIA ROVINESCU, Director, Teaching and
Learning Services
MONIR WAHHAB, Academic Adviser,
Commerce and Administration

HARRY J. ZARINS, Director, Recreation and

Lifetime Honorary Fellow MARY A. BRIAN, Adjunct Professor, Mathematics and Statistics

Athletics

Location

To advise and assist both prospective and enrolled students, Concordia maintains a Centre for Mature Students with facilities on both campuses.

J.W. McConnell Building, Room: LB 517 1400 de Maisonneuve Boulevard W. (514) 848-3890

Hours:

During Fall/Winter semesters Monday to Friday 9:00 AM to 5:00 PM

Evening hours: by appointment.

Administration Building, Room: AD 424 7141 Sherbrooke Street W. (514) 848-3895

Hours:

During Fall/Winter semesters

Monday to Friday 8:30 AM to 4:30 PM

14.1 GENERAL INFORMATION

Concordia University has a long history of making education accessible to men and women of all ages and academic backgrounds. Through mature entry, those lacking the regular pre-university requirements can still earn university degrees and certificates. Concordia also offers an audit programme which allows people 55 years of age or over to participate in courses on a non-credit basis. At Concordia, we use the term "mature entrants" to designate students 21 or over who have not completed the normal academic admission requirements. The designation does not apply to adult applicants whose academic background qualifies them for regular admission. In applying to Concordia, students apply for admission to particular programmes within one of the four Faculties of the University. In every respect, mature entrants at Concordia are treated as regular undergraduates and are expected to meet the same standards before graduating. Normally, mature entrants without any cégep or equivalent must complete at least 18 additional credits of preparatory or complementary courses. These additional credits are intended to help mature entrants to prepare for their subsequent studies. Students with partial cégep or equivalent may be given advanced standing for some of the additional 18 credits.

14.2 CENTRE FOR MATURE STUDENTS

The primary aim of the Centre for Mature Students is to provide services for mature entry students returning to formal studies after an absence of some years.

Advisers on staff are qualified to help guide students with course selections or with problems of an academic or administrative nature. The work of the advisers at the Centre is supported and enhanced by the contributions of the Centre's Fellows.

The Fellows are Concordia University faculty members especially interested in the challenges encountered by adults working towards a degree. They are available at certain times to offer advice and information on both elective and required courses in their areas of specialty. Associate Fellows of the Centre, who are generally University staff members, are available to students and advisers for consultation on a variety of concerns such as entry requirements, administrative procedures, and study skills. It is the goal of everyone involved in the work of the Centre to try to provide mature students with a sense of belonging and help them gain the self-confidence necessary for successful university work.

14.3 ADMISSION AS A MATURE STUDENT

The admission of applicants for mature entry is subject to the following conditions:

- Applicants must have reached the age of 21 by August 1 for the September term, December 1 for the January term, or April 1 for the May term in any given year;
- Although not meeting the normal academic requirements for admission (Québec Diplôme d'études collégiales or the equivalent), applicants must satisfy the University that they have the potential to undertake undergraduate courses; those who have the Québec Diplôme d'études collégiales or the equivalent should contact the Office of the Registrar regarding their admission;
- Applicants must have been out of school that is not engaged in full-time study for at least 24 months since attaining the age of 18. Applicants who have been out of school for only 12 months are also admissible provided that they have had no unfavourable academic record in the previous 24 months;
- 4. Applicants must be Canadian Citizens or Permanent Residents (Landed Immigrants). Applicants must submit proof of citizenship and age, together with school records and any material which may indicate ability to pursue university studies. Applicants are expected to arrange for official transcripts of all of their previous studies to be sent directly to Concordia; (§13 provides general information on how to apply for admission.)

 In all programmes, some students may require courses in English as a Second Language, as determined by Language Proficiency Testing. See §13.4 of this Calendar regarding Language Proficiency Testing.

14.4 PROGRAMME REQUIREMENTS

In selecting courses to fulfil the 18-credit requirement, mature students in the Faculty of Arts and Science must consult with advisers at the Centre for Mature Students. Once students have completed these preliminary courses, they select courses in consultation with advisers in their programme rather than at the Centre.

Mature students accepted into the Faculties of Commerce and Administration, Fine Arts, or Engineering and Computer Science consult directly with their Faculty in selecting courses to fulfil both the 18-credit requirement and subsequent requirements.

Arts

14.4.1
Faculty of Arts
and Science

NOTE: Mature students wishing to apply to Early Childhood and Elementary Education or BEd (TESL) must complete 18 credits prior to applying for entry.

For most BA programmes there are no specific programme prerequisites. Therefore within the initial 18 credits, students are encouraged to take courses which will broaden their background or help them develop study skills.

The programmes listed below have specific prerequisites which will take up some or all of the initial 18 credits.

Community Service (Certificate) AHSC 230³, 232³, 270³; ENGL 212³; 6 credits in the social sciences chosen in consultation with the programme adviser.

Economics (BA) MATH 209³

NOTE: Students may need one or more of MATH 200³ and MATH 206³.

Family Life Education (Certificate) AHSC 220³, 230³, 232³; ENGL 212³; 6 credits in the social

sciences chosen in consultation with the programme adviser.

Human Relations, Specialization (BA) SOCI 2123

Leisure Sciences and Therapeutic Recreation (BA)

PSYC 2006; SOCI 2123; BIOL 2006* or 2013

*Students in the Therapeutic Recreation programme must choose BIOL 200°.

Mathematics (BA) MATH 203³, 204³, 205³

NOTE: Students not having MATH 2023 or the equivalent must include it in their 18 credits.

NOTE: Students may need one or more of MATH 2003 and MATH 2013.

Psychology (BA) PSYC 200⁶; BIOL 200⁶ or 201³, three credits in Mathematics

(in preparation for statistics) chosen in consultation with the

Centre for Mature Students.

Science

For those mature entry students pursuing a degree in Science the following courses must be included within their 108-credit requirement:

6 credits in Chemistry: CHEM 205³, 206³

9 credits in Mathematics: MATH 2023, 2033, 2053*

3 credits in Physics: PHYS 204³, 205³, 224¹, 225¹

Additional requirements for programmes in the following Departments:

Biology and Psychology: BIOL 2013

 Chemistry:
 PHYS 206³, 226¹ and BIOL 201³

 Biochemistry:
 PHYS 206³, 226¹ and BIOL 201³

 Exercise Science:
 PHYS 206³, 226¹ and BIOL 201³

 Geology:
 PHYS 206³, 226¹ and GEOL 210³

Mathematics: MATH 204³

Physics: PHYS 206³, 226¹ and MATH 204³

NOTE: Students must consult with advisers of the Centre for Mature Students before registering particularly with regard to the sequencing of the above credits in the BSc degree. Consultation with the Centre for Mature Students is also necessary in the choice of the 18 additional credits required in the case of a Certificate.

^{*} Students not having MATH 2013, or the equivalent, must take it in place of one of their elective courses. Some students may also need MATH 2003.

14.4.2

Faculty of Commerce and Administration

For entry to degree programmes in Commerce and Administration, mature entry students must include the following within their 108-credit requirement:

- credits in Mathematics: 2083, 2093
- credits in Economics: 201³, 203³ 6
- elective credits, appropriate for the students' intended programme which may include 6 MATH 200 or 206. If students do not meet the computer literacy requirement, their programme must also include INTE 290 or COMP 201.

Requirements for Certificate programmes are listed with the programme descriptions in §61 of this Calendar.

Engineering

14.4.3 Faculty of Engineering and Computer Science Mature entrants to the BEng degree, which requires completion of a minimum of 116.25 to 120 credits depending on the programme chosen, are also required to complete a minimum of 18 credits beyond the normal requirements for their programme, including the following courses*:

Building, Civil, Industrial, and Mechanical Engineering: CHEM 2053

MATH 202³, 203³, 204³, 205³ PHYS 204³, 205³, 224¹, 225¹ COMP 201³

Six credits chosen from courses in the humanities and social sciences.

Electrical and Computer Engineering: The courses specified in a), plus PHYS 2063

*In all programmes, some students may require one or more of MATH 2003 and 2013 as determined by the Faculty, and/or courses in English as a Second Language, as determined by Language Proficiency Testing.

Computer Science

Mature entry students accepted to the BCompSc must include in their degree programme (minimum 108 credits) the following courses:*

- Information Systems and Computer Applications Options: MATH 202³, 203³, 204³, 205³ COMP 201³
- Software Systems and Computer Systems Options: MATH 202³, 203³, 204³, 205³ PHYS 204³, 205³, 224¹, 225¹ CHEM 205³ **COMP 201³**
- Software Engineering Option: The courses specified in b), plus PHYS 2063

Depending on the option chosen, up to six of the credits listed above may be applied towards the elective component of the regular degree programme.

*In all options, some students may require one or more of MATH 2003 and 2013 as determined by the Faculty, and/or courses in English as a Second Language, as determined by Language Proficiency Testing.

14.4.4 Faculty of Fine Arts Mature entry students wishing to pursue degree and Certificate programmes in the Faculty of Fine Arts must take 18 additional credits appropriate for entry into their ultimate area of concentration. These credits will be chosen with the approval of the Faculty adviser.

14.5 PROGRAMMES OF STUDY FOR SENIOR STUDENTS

Concordia University is committed to lifelong learning and community service. Seniors at Concordia either take credit courses in a programme or as Independent students. They can also choose to audit courses on a non-credit basis through the Senior Audit Programme administered by the Centre for Mature Students.

Students aged 55 and over who wish to attend undergraduate courses primarily in the Faculty of Arts and Science for personal interest rather than for credit, may register to audit courses. Though not required to write class assignments or final examinations, they participate in every other aspect of the courses. Senior audit students pay significantly reduced fees. For more information, call (514) 848-3893.

If seniors wish to pursue an undergraduate programme or take courses as Independent students for credit, they may do so at the regular tuition fees. Some assistance through a Senior Student Bursary is possible for those 65 or over. Applications and information may be obtained at the Financial Aid Office or at the Centre for Mature Students.

14.5.1 Senior Scholarships Five senior scholarships are offered each year by the University. They are worth \$500 a year and may be renewed for up to four years. To be eligible, candidates must be at least 60 years old, and enrolled in a minimum of 12 credits in an undergraduate or graduate programme. Educational background and life experience are taken into account in awarding these scholarships.

Additionally, the William Schiff Scholarship of \$500 is awarded annually (non-renewable) to a full- or part-time senior student aged 55 over who is enrolled in a degree programme. This scholarship is made possible by the generosity of the senior students at Concordia University.

Information on these scholarships may be obtained at the Financial Aid Office.

TUITION AND FEES

- 15.1 TUITION AND FEES
- 15.2 PAYMENT OF TUITION AND FEES
- 15.3 CANCELLATIONS WITHDRAWALS ADJUSTMENTS

15

TUITION AND FEES

15.1 TUITION AND FEES

The Calendar is an official University document defining academic programmes and the regulations which pertain to them. It is accurate as of its printing date. The University Senate reserves the right to modify the academic programmes and regulations at its discretion after the publication date of the Calendar. In addition, the University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term. The most current information is available from the Office of the Registrar and, for graduate programmes, the School of Graduate Studies. Moreover, the information contained in the Calendar or any other University document related to academic programmes and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

Tuition fees for undergraduate courses taken by regular, qualifying or Independent students, are assessed on a per credit basis as listed below:

Canadian and other students with Permanent Residence (Landed Immigrant) status:

Québec residents[†] \$ 55.61

Non-Québec residents \$123.61[‡]

- † Please refer to §13.7 of this Undergraduate Calendar for the Government of Québec rules for determining residency.
- ‡ This rate includes a \$68 per credit premium which must be collected for the Government of Québec.

NOTE: Non-Québec residents following certain programmes in the French Language, French Literature or Québec Studies may be exempt from paying this premium. Please refer to §19.3, article 8, for a list of programmes for which an exemption may be granted. These are the same programmes from which International students may be exempted from paying the International student premium.

*International students:

333.33
305.61*
275.61*

*Certain International students may be eligible to pay the same fees as Canadian students. Detailed information may be obtained from the Office of the Registrar. See §19.3 for guidelines concerning this policy.

In addition to the tuition fee, the following fees are charged on a per credit basis:

Administrative Fee \$12.00

, tarriirii di atiro i co			Ψ	
Student Service Fee			\$	8.83
Student Association and Activity Fee	:			
(Commerce and Administration -	- CASA)		\$	3.60*
(Engineering and Computer Scientific Scienti	ence – ÉCA)		\$	2.05*
(Other Faculties – CSU)	,		\$	3.39*
*Fees include:	CASA	ECA	CSU	
Association Fee	\$ 2.05	\$ 2.00	\$ 2.00	
Greening of Mackay	\$ 0.05	\$ 0.05	\$ 0.05	

Career Placement Centre \$ 1.50
The Link \$ 0.20

The Concordian			\$ 0.07
QPIRG			\$ 0.30
Canadian Confederation			
of Students			\$ 0.42
Student Broadcast Media	Fund		\$ 0.08
Women's Centre			\$ 0.27
Total Fee	\$ 3.60	\$ 2.05	\$ 3.39

In addition to the tuition, student service and student association fee, the following fees are charged:

Capital Campaign

All students (except Engineering and Computer Science) \$ 2.00 per credit (up to a maximum of \$30 per term)

Engineering and Computer Science students

Full-time (24 credits or more) \$60.00 per year
Part-time (fewer than 24 credits) \$30.00 per year

On March 19, 1997, the University's Board of Governors ratified a motion presented by student leaders that introduced a mandatory Capital Campaign Fee for all students. While the fee is mandatory, the University and student leaders are aware and sensitive to the possibility that some students may be in difficult financial circumstances and consequently should be exempted from paying the Capital Campaign Fee.

If you feel your personal financial circumstances prevent you from paying the fee, submit a *Capital Campaign Fee Exemption Application* form along with all required supporting documentation to the drop-off box in the Birks Student Service Centre (SGW – LB 185) or to the Dean of Students Office (LOY – AD 121).

Registration Fee	\$ 20.00 per term
Concordia Student Safety Patrol Fee	\$ 1.00 per term
Le Frigo-Vert	\$ 1.70 per term
(except Summer)	•
Concordia Student Health and Dental Care Plan	\$153.00 per year

Coverage	Sept Aug.	Sept Dec.	Jan Aug.
Health & Dental Plan	\$153.00	\$ 51.00	\$102.00
Health Plan Only	\$ 66.00	\$ 22.00	\$ 44.00
Dental Plan Only	\$ 87.00	\$ 29.00	\$ 58.00

Some students may be eligible to opt out of the Student Health and Dental Plan. Students who wish to opt out of the plan (dental and/or health) must present themselves to the Québec Student Health Alliance, Suite 200, 2045 Stanley St., (514) 844-4423. Students who are registered in the Fall or Fall/Winter semesters must opt out between the first day of Fall-term classes and the Fall-term DNE deadline (September 5 – 19, 2000).

Students enrolled in Fall and Winter-term courses **may not opt out** after the September deadline or during the Winter-term opt-out period. Students who are registered in the Winter semester only must opt out between the first day of Winter-term classes and the Winter-term DNE deadline (January 3 – 18, 2001).

\$ 35 \$ 25 \$475 per year August)
\$380
\$190
\$185 per term
\$297.75 per month
\$255.75 per month
\$ 1 \$ 50 \$ 40 \$ 3.50 per year \$ 50

Course Descriptions (maximum \$25)	\$	5 per academic year
Degree:		
Mailing of Degree	\$	15
Certification of Copy of Degree	\$	3
Replacement Degree	\$	50
Duplicate of Receipt	\$	2
Examination:		
Deferred Examination/Medical Examination Processing Fee	\$	15
Off-Campus Examination		10
Special Examination Fee (CELDT)	\$	20
Supplemental Examination		
(plus Invigilation Fee when applicable)	\$	25
Fax Fee (for each 10 pages or less, excluding cover sheet):	\$	10
Graduation:		
Graduation Fee	\$	40
Late Application to Graduate		15
Handling Charge on a Returned Cheque	\$	
Late Completion Fee		15
Letter of Attestation or Attestation Form		10
Letter of Financial Standing	\$	6
Off-Campus Centre Charge	\$	5 per credit*
Re-evaluation Processing Fee	\$	15
Registration:		
Authorization to Register Fee (Independent Student)	\$	15
Late Registration Fee	\$	25
Student Record (copy of)	\$ \$ \$	3
Transcript of Academic Record (per address – maximum 3 copies)	\$	9
(includes \$3 for student copy – see Fax Fee if applicable)	Φ	40
Tuition Receipts – (no charge for first set)	\$	12
(Taxation years 1995 and later; copies of T2202, Relevé 8 and Provincial Tuition Receipt)		
Universal Identification Card	\$	11.50
Replacement of Identification Card	\$	11.50
University Calendar (no charge for first copy)	φ \$	7
oniversity Calendal (no charge for mist copy)	Ψ	1

*There are surcharges (cost varies by course) for Distance Learning and Off-Campus courses. For further information, please contact the Open and Distance Learning Coordinator at (514) 848-3440. Interest is payable on the outstanding balance of student accounts at the rate of 0.8% per month (10% per annum). This rate may change from time to time in conformity with prevailing interest rates.

15.2 PAYMENT OF TUITION AND OTHER FEES

Concordia University has a "no-cash" policy. The University will not accept cash for the payment of student tuition and other fees. Payments can be made by debit card (Interac), MasterCard, Visa, certified cheque, money order, or personal cheque.

Financial Obligations: In order to register and remain registered in future sessions, a student's account must be in good standing. All monies owing to the University (such as tuition and other fees, multi-term tuition fees, Residence rent, delinquent emergency loans, etc.) must be paid when due. Students with overdue or delinquent accounts are not permitted to register or re-register until payment or satisfactory payment arrangements have been made with the Student Accounts Office. Once a student has registered for a course(s), he/she is responsible for payment of the resulting fees. If a course is dropped within the deadline for official course withdrawal (DNE), a full refund (or financial credit) of tuition and other fees will be granted. If the course(s) is not dropped on or before the DNE deadline, the student will be held financially responsible for all resulting tuition and other fees. No partial refunds can be granted. In the event that a student has not yet made payment and withdraws after the DNE deadline, the student will be held financially responsible for the payment of the resulting fees.

Students are required to make payment when fees become due whether or not they have received an invoice or statement of account. Up-to-date account balances and deadline dates are available on CARL [(514) 275-2275] and on Concordia's Web site for Personal Student Information (www.concordia.ca). Consequently, the University will not issue a statement of account every month or when a payment becomes due.

The consequence for non-payment by the payment deadline dates noted below is the cancellation of all **future** course registrations.

August 1 Summer-term (/1) courses
Fall DNE deadline — September 19, 2000 Fall-term (/2) courses
Fall DNE deadline — September 19, 2000 Two-term (/3) courses
Winter DNE deadline — January 18, 2001 Winter-term (/4) courses

Payment is due as follows:

Summer Registration

Summer Term (/1 courses)

- Payment is due upon registration. Interest will be charged on outstanding balances beginning May 31.
- 100% of all Summer fees (/1 courses) must be paid by August 1. The consequence for non-payment by the payment deadline is the cancellation of all future course registrations beginning with the next Fall Term (all /2, /3 and /4 courses).

Fall/Winter Registration

Fall Term (/2 courses)

100% of all Fall Fees (/2 courses) must be paid by the Fall-term DNE deadline date — September 19, 2000. Interest will be charged on outstanding balances beginning September 30. The consequence for non-payment by September 19 is the cancellation of all future course registrations beginning with the next Winter Term (all /4 courses).

Fall/Winter Term (/3 courses)

- 50% of all Fall/Winter, two-term fees (/3 courses) must be paid by the Fall-term DNE deadline date September 19, 2000. Interest will be charged on outstanding balances beginning September 30. The consequence for non-payment by September 19 is the cancellation of all future course registrations beginning with the next Winter Term (all /4 courses).
- The remaining 50% of all Fall/Winter, two-term fees (/3 courses) must be paid by the Winter-term DNE deadline date — January 18, 2001. Interest will be charged on remaining fees beginning January 31. The consequence for non-payment by January 18 is that no registration in future academic sessions will be permitted until all overdue accounts are paid in full.

Winter Term (/4 courses)

100% of all Winter fees (/4 courses) must be paid by the Winter-term DNE deadline date — January 18, 2001. Interest will be charged on outstanding balances beginning January 31. The consequence for non-payment by January 18 is that no registration in future academic sessions will be permitted until all overdue accounts are paid in full.

Once students have registered for courses, they are responsible for the payment of all resulting fees. Please refer to §15.3 for information concerning Withdrawal Rebates.

Unpaid Accounts: The University shall have no obligation to issue any transcript of record, award any diploma or certificate, retain registrations in future terms (i.e. early-registered courses) or reregister a student in the case of non-payment of tuition fees, library fines, residence fees, University loans or any other monies owing to the University.

N.B. Tuition Deferrals, Payroll Deductions, and special payment agreements do not supersede the Concordia University tuition and other fees payment policy. Students will not be exempted from paying interest charges on outstanding balances. Transcripts, degrees, diplomas, and other official records will not be released and students will not be permitted to register for additional courses or future academic sessions until all outstanding balances are paid in full.

Adjustment to Accounts: All accounts are subject to revision, as well as in the case of courses cancelled by the University. The University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term.

Returned Cheques: Current and/or future registrations may be cancelled if a cheque is returned for any reason. (Note: For all "returned" cheques, replacement must be made by certified cheque, money order, MasterCard, Visa, or debit card [Interac].) In any event, a charge of \$15 will be made for each returned cheque.

15.3 CANCELLATIONS — WITHDRAWALS — ADJUSTMENTS

WITHDRAWAL REBATES

Withdrawal from a course, courses or a programme: Students who withdraw from courses or from the University must comply with the requirements set out in this section in order to qualify for any rebate of tuition. Students who are granted late academic withdrawal from a course, courses, or a programme after the deadline for academic withdrawal has passed, do not qualify for a rebate of tuition. Once students have registered for courses, they are responsible for payment of the resulting fees.

In order to qualify for a rebate or financial credit of tuition, students must withdraw from courses or from the University in compliance with the requirements and withdrawal deadlines set out in the appropriate Undergraduate Class Schedule. In the event that students have not yet made payment for these fees, students will be held financially responsible if they do not withdraw from a course, courses, or from the University on or before the prescribed withdrawal (DNE) deadline. Complete withdrawal from the University must be done in person at the Birks Student Service Centre, via CARL, or in writing via registered mail.

Rebate of Tuition

The following rebates are applied to withdrawals effected in a current academic year.

Summer Session

Courses of at least three weeks duration: withdrawal within one week of the start of the term. No refund after that date.

Courses of less than three weeks duration: withdrawal on or before the first day of the term. No refund after that date.

Courses which begin in September (/2 and /3 courses)

Withdrawal on or before the Fall-term DNE deadline date — September 19, 2000: a full refund. No refund after the deadline.

Courses which begin in January (/4 courses)

Withdrawal on or before the Winter-term DNE deadline date — January 18, 2001: a full refund. No refund after the deadline.

N.B. Exact deadlines are also published in the Undergraduate Class Schedule.

Tuition Refund Request Committee

- The Tuition Refund Request Committee (the Committee) considers requests from full-time or part-time students for exceptions to the rules governing the refund of tuition fees.
- 2. A refund request shall be made on a *Tuition Refund Request* form available at the Birks Student Service Centre, the Dean of Students Office, and on the Student Accounts' Web site. A request with respect to a Fall-term course must be made no later than the following February 1; with respect to a Fall-Winter or Winter-term course, no later than the following June 15, and with respect to a Summer-term course, no later than the following October 1. These deadlines may be extended by the Committee in particular cases if the student can provide evidence that he or she was unable to have acted within the deadlines.
- 3. The Committee shall be composed of four members: a Chair appointed by the Provost and Vice-Rector, Research, a representative from the Student Accounts Unit, a representative from the Office of the Registrar, and a student representative.
- 4. The Committee shall render a decision, based on the written record only, normally within thirty (30) working days of receiving the request. The Committee may reject the request, grant a partial refund or a complete refund. No refunds may be granted unless the student has officially withdrawn from the course(s) in question. The decision of the Committee is final.

OFF-CAMPUS COURSES: Same schedule as on-campus courses.

ACADEMIC INFORMATION: DEFINITIONS AND REGULATIONS

16.1	GENERA	AL INFORMATION
	16.1.1	Academic Year
	16.1.2	
	16.1.3	
	16.1.4	3
	16.1.5	Cancellation of Classes
	16.1.6	Withdrawal
	16.1.7	
	16.1.8	Student Request Committees
	16.1.9	
	16.1.10	
	16.1.11	Transcript
16.2	CURRIC	ULUM REGULATIONS
	16.2.1	Modifications to Academic Programmes and Regulations
	16.2.2	Degree Regulations
	16.2.3	Concentration Requirements
	16.2.4	Writing Skills Requirement
16.3	EVALUA	TION, GRADING SYSTEM, EXAMINATIONS,
	AND PE	RFORMANCE REQUIREMENTS
	16.3.1	Evaluation
	16.3.2	Language of Instruction and Examinations
	16.3.3	Grading System
	16.3.4	Failing Grades and Administrative Notations
	16.3.5	Administrative Notations "DISC", "DNW", "INC", "MED", "DEF"
	16.3.6	Late Completion of Courses with "INC" Notations —
		Procedures and Regulations
	16.3.7	Deferred "DEF", Medical "MED" Notations and Supplemental Examinations
		Procedures and Regulations
	16.3.8	Academic Re-evaluation
	16.3.9	
		Academic Performance
	16.3.11	High Academic Achievement
	16.3.12	Repetition of Courses
	16.3.13	Code of Conduct (Academic)

6 ACADEMIC INFORMATION: DEFINITIONS AND REGULATIONS

University Registrar LYNNE PRENDERGAST

> Manager - Support Services LINDA HEALEY

Supervisor - Registration and Examinations

LINDA HULL

Supervisor - Birks Student Service Centre

LORRAINE TOSCANO

Statistics DOUGLAS GARDHOUSE Assistant Registrar

Supervisor - Records Management and

Assistant Registrar **BRUCE MACKENZIE**

Assistant Registrar TERRY TOO

PETER REGIMBALD

16.1 **General Information**

The Calendar is an official University document defining academic programmes and the regulations which pertain to them. It is accurate as of its printing date. The University Senate reserves the right to modify the academic programmes and regulations at its discretion after the publication date of the Calendar. In addition, the University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of the upcoming academic year. The most current information is available from the Office of the Registrar and, for graduate programmes, from the School of Graduate Studies. Moreover, the information contained in the Calendar or any other University document related to academic programmes and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

The regulations contained in this section apply to all students at the undergraduate level, whether they are enrolled in degree, Certificate, or qualifying programmes or registered as Visiting or Independent students, with the following exceptions:

- Degree, Certificate, and qualifying programme requirements are determined by those in effect in the year of the student's admission. (See §16.2)
- The regulations concerning Residence Requirements and Academic Performance Requirements are also governed by those in effect in the year of a student's admission.
- Determination of High Academic Achievement is governed by the most recent regulation in

Students who were admitted before the current year should consult the appropriate Calendar and the Office of the Registrar or, for graduate programmes, the School of Graduate Studies, for information on these regulations.

Specific written permission must be obtained from the appropriate authority for exemption from any academic regulation.

Students must have a valid I.D. card to access certain services.

16.1.1 Academic Year The Academic Year begins with a Summer Session (May to August) followed by a Regular Session (September to April).

Summer Session:

The Summer Session includes all courses offered between the beginning of May and the end of August.

Regular Session:

The Regular Session is divided into a Fall Term (September-December) and a Winter Term (January-April), each 15 weeks long. Terms include an examination period, during which any final examination must be held. The Academic Calendar §11 lists precise dates for the beginning and end of classes and examination periods.

16.1.2 Credit System In accordance with the recommendations of the Conseil des Universités du Québec, students' academic activity is measured according to the credit system. For the average student, each credit represents a minimum of 45 hours of academic activity, including lectures, tutorials, laboratories, studio or practice periods, examinations, and personal work.

I. FULL- AND PART-TIME STATUS

A student's status is determined by the number of credits for which she or he is registered at the close of the tuition refund period, in the following way:

	Full-Time*	Part-Time
Registration for both Fall and Winter terms	24 Credits or More	Less than 24 Credits
Registration for Fall Term Only	12 Credits or More	Less than 12 Credits
Registration for Winter Term Only	12 Credits or More	Less than 12 Credits
Registration for the Summer Session	12 Credits	Less than 12 Credits

*NOTE: Students receiving Québec loans and bursaries are advised that, according to the rules established by the Government of Québec, they must maintain registration of 12 credits or more **each term**. For further information, see Financial Aid §18.7.1.

II. CREDIT LOADS

Regular Session — Full-Time Status

Full-time students normally take 30 credits in each Regular Session. They may register for a maximum of 15 credits in each of the Fall and Winter terms. Engineering programmes may require more than 30 credits. For information on Engineering credit loads, see §71.

Regular Session — Part-Time Status

Part-time students in all Faculties may register for a maximum of nine credits in each of the Fall and Winter terms.

Regular Session — Independent Status

Independent students may normally register for a maximum of nine credits in each of the Fall and Winter terms.

Summer Session

Any student, other than one in the Institute for Co-operative Education (§24) or the Faculty of Engineering and Computer Science (§71), may register for a maximum of 12 credits during the Summer Session.

16.1.3 Residence Requirements Residence requirements define the number of credits which students working towards a Concordia University degree must take at the University itself.

- Of the total number of credits required for an undergraduate degree, students must take a
 minimum of 45 credits, normally the last 45, at Concordia University. The BEng, the BA (Early
 Childhood and Elementary Education), the BEd (TESL), and the BFA (Art Education) require 60
 credits, normally the last 60, at Concordia.
- At least 50% of the credits for Honours, Specializations, Majors, Minors or other concentrations must be taken at Concordia.
- 3. Concordia University students who wish to include courses taken at another university within their residence requirements must obtain permission in advance. (See §16.1.7)
- 4. Students who already have an undergraduate degree may undertake a second undergraduate degree, subject to the conditions below. (Before registering, such students should consider whether their purpose might be better served by taking a graduate degree, diploma, or certificate programme.) To obtain a second undergraduate degree, students must:
 - a) register in a programme with a higher concentration than a Minor, and
 - complete at least two-thirds of the credits normally required for the second degree in courses other than those credited to the first degree — for example, a minimum of 60 credits must be completed when the normal requirement is 90 credits, and
 - c) complete at least 36 credits in the new field of concentration.
- An exception to 4b) above, is the BEd in TESL, for which students must complete at least half of the 120 credits required for the second degree in courses other than those credited to the first degree.
- Any student who is accepted at Concordia University after failing or compiling an unsatisfactory record at another university, will generally be required to complete at least 60 credits.

16.1.4 Registration for Courses

Students select courses for each session (Summer and Fall/Winter) prior to the start of classes. All returning students in good standing and newly admitted students will receive registration material by mail; new Independent and Visiting students can obtain registration information at the Birks Student Service Centre.

Most students will be able to register for all their courses by touch-tone telephone using CARL, the Concordia Automated Response Line.

16.1.5 Cancellation of Classes

If no class cancellation notice is posted on the classroom door, classes are officially considered cancelled if an instructor is 15 minutes late for a 50-minute class, 20 minutes late for a 75-minute class, or 30 minutes late for longer classes.

16.1.6 Withdrawal Students who wish to withdraw from a course or courses must notify the Office of the Registrar. This can be done by calling the Concordia Automated Response Line (CARL), in person at the Birks Student Service Centre, or by letter. (For their own protection, students should send such letters by registered mail or by fax.)

Students who wish to withdraw from the University completely must withdraw from all their courses and notify the Office of the Registrar in writing.

Withdrawal deadlines are listed in the Academic Calendar (§11) and in the appropriate Class Schedules. Rebates of tuition and other fees are only given for a limited time. (See §15)

The responsibility for taking all steps necessary to withdraw from courses is entirely the student's. Not attending classes or informing an instructor of an intent to withdraw does not constitute official withdrawal. An evaluation by the instructor of a student's progress is not mandatory prior to the withdrawal deadline. Students who do not properly withdraw before the specified deadlines will receive failing grades.

16.1.7 Studies at Other Universities

With the exceptions listed below, students who wish to take courses at other universities for transfer credit (for example, in the Summer) must obtain permission in advance from their Faculty Student Request Committee.

Cross-registration within Québec (Inter-University Agreement)

Québec universities have agreed to permit students registered at one university (called the home university), to take one or more courses at another university (called the host university) if they have valid reasons for doing so.

A student must obtain authorization to cross-register from his or her academic adviser, the appropriate Associate/Vice-Dean or delegate of the student's Faculty, and the Registrar. Authorization forms are available from the Birks Student Service Centre and the Faculty Dean's offices.

The host university has the right to refuse to register a student from another university in any of its courses or programmes. Students are expected to follow the registration procedures of the host university and are subject to the regulations of the host university, except for tuition and fee policies which are governed by the home university. Fees are paid to the home university.

Credit earned at host universities counts towards Concordia residence and degree requirements. The grades achieved at other institutions for courses taken under the Inter-University Agreement will be recorded on Concordia records and transcripts using a conversion table that will be published by the Office of the Registrar each academic year. Copies of the conversion table are available at the Birks Student Service Centre.

These grades will be included in the calculation of Grade Point Averages in the same manner as any grade achieved in a course taken at Concordia.

2. International Exchange Programmes (ISEP)

To enhance relationships between the people and cultures of different countries and to promote international education at Concordia University, the Centre for International Academic Cooperation (CIAC) together with La Conférence des recteurs et principaux des universités du Québec (CRÉPUQ) administer International Student Exchange Programmes (ISEPs) with universities in Europe, Mexico and the United States. Concordia's CIAC has also established several bilateral ISEPs through cooperative linkage agreements permitting Concordia students to study for a term or the academic year in a partner institution while remaining a registered student at Concordia University. These programmes are available to all full-time Concordia University students who meet the following conditions:

- they have a good to excellent academic record and are in good academic standing;
- they have completed at least one year of full-time study in the programme in which they are
- they have written permission of their Faculty
- in most cases, they should be fluent in the language of the host institution;
- they must assume health insurance fees, living expenses and transportation costs to and from the host country.

An important aspect for students considering participating in the ISEP is that tuition fees for these programmes are, in general, payable to the home university.

Further information and application forms are available from the Centre for International Academic Cooperation – Loyola Campus, Administration Building, Room: AD 207 – (514) 848-4987, fax 848-2888, or E-mail: francis@vax2.concordia.ca. The application deadline is February 12.

16.1.8 Student Request Committees

- Student Request Committees consider applications from full-time or part-time students for exceptions to academic regulations or related matters, such as permission for course overloads, registration or withdrawals after the deadline, course substitutions, exceptions to residence requirements, and permission to take courses at other universities. Students shall submit applications to the Student Request Committee of the Faculty in which they are registered. Independent students shall submit applications to the Independent Student Request Committee.
- A student request shall be made on a Student Request form available:
 - for students registered in the Faculty of Commerce and Administration, the Faculty of Engineering and Computer Science, or the Faculty of Fine Arts — from the relevant Student Affairs Office;
 - ii) for students registered in the Faculty of Arts and Science — from the academic department housing the programme in which they are registered;
 - for Independent students from the Birks Student Service Centre.
- A student request shall be made within a reasonable period of time from the circumstances giving rise to the request. In determining whether the period of time elapsed is reasonable, all of the circumstances of the case shall be evaluated.
- Each Faculty shall have a Student Request Committee composed of:
 - three faculty members appointed by the Faculty Council;
 - one representative appointed by the Registrar;
 - one student appointed by the Faculty Council;
 - the Associate/Vice-Dean who shall Chair the Student Request Committee.

The Independent Student Request Committee shall be composed of:

- one representative appointed by each Faculty Council for a total of four representatives;
- one representative appointed by the Director of the Centre for Mature Students;
- one student appointed by the Concordia Student Union;
- one representative appointed by the Registrar who shall Chair the Independent Student Request Committee.
- A Student Request Committee may delegate the responsibility for handling certain kinds of requests to designated individuals (e.g. academic advisers, faculty advisers, student affairs coordinators). Where a decision is made by a delegated individual, the student may appeal that decision to the Student Request Committee, as a whole, based on new evidence or other serious grounds, by sending an appeal request, in writing, to the Chair of the Student Request Committee within ten (10) working days of receiving the decision.
- In all cases, the delegated individual and/or the Student Request Committee shall render a reasoned written decision, based on the written record only, normally within thirty (30) working days of receiving the request. Decisions of the Student Request Committee are final.

16.1.9 Graduation Degree and Certificate candidates who expect to complete requirements in a particular year must submit Graduation Application Forms to the Office of the Registrar before July 15 for Fall graduation and before January 15 for Spring graduation. The forms are available at the Birks Student Service Centre. The graduation fee is payable whether or not a student attends Convocation.

16.1.10 Student Record A record is a comprehensive report of a student's academic history at the University. It is a complete academic record and includes all courses followed at Concordia. It is available to the student and to authorized University staff and faculty. Students may obtain a copy of their record from the Birks Student Service Centre during normal operating hours or by written request. For each copy there is a charge of \$3. Students may also access their record through the Concordia Web Site, www.concordia.ca, at

16.1.11 Transcript A transcript is a version of a student's record intended for the use of external institutions, organizations, and employers. It is a complete academic record and includes all courses followed at Concordia. It is accompanied by an explanation of its terminology and is sent directly to the addressee at the written request of the student, providing there is no outstanding account owing to the University. An official transcript is printed on security paper, and is signed and sealed by the Registrar's representative.

16.2 **Curriculum Regulations**

16.2.1 Modifications to Academic Programmes and Regulations

With the exception of the following conditions, the curriculum requirements in effect at the time students are admitted to a programme (e.g. BA, BFA, Certificate in Business Studies) and/or concentration (e.g. Major, Specialization), are the requirements which apply to them until they complete their programme.

The University reserves the right to modify academic programme requirements in the light of (a) changing trends in academic and professional fields, and (b) the availability of resources. In the exceptional event that a programme is substantially altered by the University Senate, the University recognizes its responsibility to offer suitable transition arrangements for students. The new programme requirements should become effective for all students no later than five years after the effective date of change for newly admitted students.

- When a programme is discontinued, the University recognizes its responsibility to offer courses in the programme while phasing it out according to a schedule appropriate to the needs of the affected students. Students will be informed of the schedule when the decision is made to phase the programme out.
 - When students in a discontinued programme have not been registered for three years, it may not be possible to enable them to complete that programme. They may, however, transfer into another programme in the University for which they meet the admission requirements.
- Where students acquire credit towards a degree or Certificate in a discontinuous manner and over a protracted time, the University reserves the right, at any time, to require them to take further credits or fulfil additional requirements to obtain that degree or Certificate.
- Modifications to the academic regulations in §16.1 and 16.3 become effective for all students on a given date regardless of the student's date of admission to a programme, with the following exceptions:
 - 16.1.3 Residence Requirements
 - 16.3.10 Academic Performance Requirements
 - 16.3.11 High Academic Achievement

Modifications to these three regulations apply only to students admitted or readmitted to a programme on or after the effective date of such modifications.

In the event a student is readmitted after failing an academic year, the University reserves the right to require the student to take additional credits or to repeat certain courses. The student is also subject to changes in academic regulations or programme requirements in effect at the time of the student's readmission.

The regulations relating to degree requirements are located in the Faculty sections:

Faculty of Arts & Science Section 31 Faculty of Commerce & Administration Section 61 Section 71 Faculty of Engineering & Computer Science Faculty of Fine Arts Section 81

Degree Regulations

16.2.2

16.2.3 Concentration Requirements Every undergraduate programme requires a cohesive sequence of courses. To graduate in a degree programme, a student must have completed one of the following concentrations: Honours, Specialization, Major, or in the Faculty of Fine Arts, Double Minor. Honours is a highly concentrated programme with a required performance level; the Specialization and the Major require varying degrees of concentration, normally without a performance requirement; the Double Minor involves a lesser degree of concentration in two disciplines or fields without a performance requirement. An Honours, Specialization, or Major can be combined with a Minor. In some circumstances, a Double Major is also possible.

1. Honours Programmes

The University offers programmes leading to an Honours degree in certain disciplines. The Honours programme consists of 60 or more credits in a discipline, with superior performance required to enter and remain in the programme. In their first year, students may register in Honours programme courses, but their acceptance as Honours students will depend on their performance. Students who do not meet requirements for Honours standing may proceed in either a Specialization or a Major programme. These regulations are the minimum academic standards for Honours programmes. The programmes and particular Faculty regulations are listed in the Faculty sections under "Honours Programmes".

- An Honours student must meet general degree requirements and the specific requirements for an Honours programme.
- An Honours student must maintain a Grade Point Average (GPA) of 3.00 in all Honours courses; the minimum acceptable grade in any Honours course is "C".
- An Honours student must have a minimum GPA of 2.70 for Honours courses taken each year. For part-time students this is calculated in 18-credit blocks.
- In non-Honours courses, an Honours student must have a GPA of no less than 2.00.
- Honours students who do not meet these standards will be withdrawn from the Honours programme and will proceed in the Major or Specialization programme. Reinstatement in the Honours programme is possible only with the permission of the Faculty Honours Committee.

Specialization Programmes

A Specialization, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 60 or more credits. In a few cases it includes a performance requirement. In addition to courses in a particular discipline, the Specialization may include courses in other closely related fields.

3. Major Programmes

A Major, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 36 or more credits, except in the Faculty of Commerce and Administration where the Major consists of at least 24 credits in a particular discipline in addition to the required 42-credit core. The Major may include certain courses in other closely related fields.

4. Minor Programmes

A Minor, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 24 or more credits, except in the Faculty of Commerce and Administration where the Minor consists of at least 12 credits in the chosen discipline in addition to the required 42-credit core.

5. Double Minor Programmes

In the Faculty of Fine Arts, a Double Minor programme is made up of two sequences of courses in different disciplines, each totalling 24 or more credits.

6. Combined Programmes

An Honours, Specialization, or Major programme may be combined with a Minor programme. In some circumstances, a Major programme may also be combined with another Major programme.

7. Certificate Programmes

An undergraduate Certificate is a coherent programme, usually of 30 credits, made up of regular undergraduate courses. Courses taken as part of a Certificate programme are normally applicable to the appropriate undergraduate degree. There is no guarantee that a Certificate programme can be completed in one academic year.

16.2.4 Writing Skills Requirement Concordia University is committed to ensuring that its graduating students possess good writing skills. Hence, every student in an undergraduate degree programme is required to demonstrate competence in writing English or French prior to graduation. Students are strongly encouraged to meet the requirement very early in their programme to avoid the risk of delayed graduation should remedial work prove necessary.

Note: Independent students and students enrolled in Certificate programmes are not subject to the writing skills requirement.

Students, other than those required to take an English proficiency test prior to admission, can meet the requirements in one of two ways:

Taking a writing course

Any student can satisfy the writing skills requirement by achieving a grade of "C-" or better in English (ENGL) 212 or Français (FRAN) 400.

Students in the Faculty of Engineering and Computer Science are required to take ENCS 281. A grade of "C-" or better in that course satisfies the requirement.

Students in Journalism programmes satisfy the requirement by achieving a grade of "C-" or better in the required course JOUR 201.

b) Taking the University Writing Test (UWT)

The UWT requires a short composition in English or French on the student's choice of several topics. The test is offered a number of times throughout the year and students may take it as often as necessary. (Unsuccessful attempts do not appear on their record.) There is no fee for the UWT.

All newly admitted students, except those required to take ENCS 281 or JOUR 201 and those already registered for ENGL 212 or FRAN 400, should register for the first available sitting. Dates for the test and registration procedures are listed in §11 and are announced in the campus media and at the Birks Student Service Centre.

Following each sitting of the UWT, students who have taken it will be notified of one of the following:

- a) that they have passed the test and satisfied the writing skills requirement; or
- that they should retake the test or register for an appropriate writing course, at their discretion; or
- c) that it is unlikely they will pass the UWT or be admitted to ENGL 212 or FRAN 400 without the remedial work offered in ENGL 205, ENGL 206 or comparable courses in Études françaises.

2. Students required to take an English proficiency test prior to admission

Students who achieve a prescribed level on the Concordia English Language Diagnostic Test (CELDT), the Test of English as a Foreign Language (TOEFL), or the University of Michigan English Language Test, have satisfied the writing skills requirement. Information about the scores required can be obtained from the Office of the Registrar.

Students admitted with the requirement that they take specific courses in English as a Second Language (ESL) satisfy the writing skills requirement by achieving a grade of at least "C-" in ESL 209.

16.3 Evaluation, Grading System, Examinations, and Performance Requirements

16.3.1 Evaluation A university degree certifies that its holder has attained a measurable level of achievement as established by a recognized system of evaluation. Thus the performance of each student in each course must be evaluated by the instructor or instructors responsible for the course. Final grades are determined by students' performance on one or more of the following:

- Assigned work, term papers, projects, etc.
- 2. Class participation which, in certain disciplines, may justify an attendance requirement
- 3. Progress tests
- Laboratory tests and/or laboratory work
- Mid-term and/or final examinations
- Level of written expression.

The weight accorded to the various elements is at the discretion of the instructor or instructors responsible for the course.

At the beginning of a course the instructor will provide students with the evaluation scheme in writing. The scheme cannot be altered without appropriate notice.

Normally, an instructor will submit final grades no later than seven days after the scheduled final examination in a course or, where there is no final examination, seven days after the last scheduled class in a course. In the case of grades for potential graduates at the end of the Winter Term, instructors are asked to submit grades within three days. There may be additional delays before grades are posted as approvals of the grades and processing time are necessary. Students may obtain their grades by calling CARL — Concordia Automated Response Line at (514) 275-2275, by accessing the Touch Screens on campus, or through the Concordia Web Site at www.concordia.ca. Final grades are official only when they have been approved by the appropriate Faculty Dean or delegate and posted by the Office of the Registrar. The University reserves the right to make corrections at any time in case of error.

16.3.2 Language of Instruction and Examinations

While courses at Concordia University are normally taught in English, if students prefer, they may write assignments and examinations in either English or French. However, language and literature courses may require assignments and examinations to be written in the language being studied. Students who wish to write in French should ask at the beginning of a course whether their instructor can read French or whether someone else will evaluate their work. If the work must be read by another person, extra time may be needed.

16.3.3 Grading System At the end of each course, the instructor will submit a letter grade for every student registered. Using the grade point equivalents listed below, Grade Point Averages (GPA) are calculated for the evaluation of academic achievement, Honours standing, prizes, and academic standing.

	Grade	Grade Points	
	A+ A- A-	4.30 4.00 3.70	Outstanding
	B+ B-	3.30 3.00 2.70	Very Good
	C- C+ C+	2.30 2.00 1.70	Satisfactory
	D+ D-	1.30 1.00 0.70	Marginal Pass
	F, FNS	0	Poor — Failure
	R	0	Very Poor — Failure
Reported	(NR)	0	

Grade Not

Passing courses required to fulfil curriculum requirements is not sufficient to graduate as there is also an academic performance requirement (Grade Point Average) in most degree and certificate programmes. See the pertinent section of each Faculty's entry in the Calendar for complete details:

Faculty of Arts and Science Section 31
Faculty of Commerce and Administration Section 61
Faculty of Engineering and Computer Science Section 71

The Faculty of Fine Arts does not have a Grade Point Average requirement for graduation.

16.3.4
Failing Grades and
Administrative
Notations

Failing Grades "F", "FNS", "R", and "NR" notations

- "F" indicates failure in a course in which a supplemental examination is available.
- 2. "FNS" indicates failure in a course in which no supplemental examination is available.
- In a course graded "R", a student is not permitted to write a supplemental examination, apply for a "MED" or "DEF" notation, or complete work late.
- 4. Not Reported "NR" indicates that a student appears to have unofficially withdrawn from a course. It is assigned by the Registrar when no material is available to evaluate and the instructor has been unable to submit a grade. "NR" carries a grade point value of zero and counts as a failure.

In a course with an "NR", a student is not permitted to apply for a "MED" or "DEF" notation, write deferred or supplemental examinations, or complete work late.

16.3.5 Administrative Notations "DISC", "DNW", "INC", "MED", "DEF"

- Discontinued "DISC" indicates that a student has properly withdrawn from a course after the
 end of the course-change period. The notation appears permanently on academic records and
 official transcripts. It carries no grade point value and does not count in assessments of
 academic standing.
- 2. Did Not Write "DNW" indicates that a student has not written the final examination for a course. The notation is used only in combination with a letter grade (such as "F/DNW", "B/DNW"). A student in good standing may write a supplemental examination (if available) in a course with a "DNW" unless the grade is "R/DNW" or "FNS/DNW". For information on how to apply for supplemental examinations and the regulations which govern them, see §16.3.7 III.
- 3. Incomplete "INC" indicates that a student has not completed required course work, such as a term paper, assignment, or laboratory and that the instructor has agreed to accept the work after the due date. The notation is used only in combination with a letter grade (such as "F/INC", "C/INC") and is assigned on the basis that the missing work is weighted as zero. When appropriate, "DNW" and "INC" can be used simultaneously (e.g. "F/INC/DNW"). For information on how to apply to complete courses with an "INC" notation, and the regulations which govern late completion, see §16.3.6.
- 4. Deferred "DEF" indicates that a student has been unable to write an examination because of short-term illness or circumstances beyond the control of the student, or was obliged to be absent for some other compelling reason (including religious reasons). A "DEF" notation carries no grade point value.
 - For information on how to apply for "DEF" notations and the regulations which govern them, see §16.3.7 I.
- Medical "MED" indicates that a student has been unable to write an examination or complete other assignments due to a long-term medical situation. A "MED" notation carries no grade point value.

For information on how to apply for "MED" notations and the regulations which govern them, see $\S16.3.7\ II$.

16.3.6
Late Completion of
Courses with "INC"
Notations —
Procedures and
Regulations

- The deadlines for completion of course assignments are given to students on the first day of class. The "INC" notation is assigned when an instructor has agreed that a student may complete work after the deadline.
- A student with an "R" grade or "NR" notation in a course may not apply for late completion in that course.
- Students must apply for late completion of a course. Applications for Late Completion are available at the Birks Student Service Centre. For each course there is a charge of \$15. Completed applications must be returned to the Birks Student Service Centre by:

February 1: Fall-term courses

May 15: Winter and Fall/Winter courses September 1: Summer-session courses

4. The completed work must be submitted by:

February 15: Fall-term courses

May 30: Winter and Fall/Winter courses September 15: Summer-session courses

5. It is the responsibility of the instructor to submit a final grade within five days of these dates.

16.3.7 Deferred "DEF" Medical "MED" Notations and Supplemental Examinations -Procedures and Regulations

Deferred "DEF" Notations

- A student who has missed an examination because of short-term illness; circumstances beyond his or her control; or who has been obliged to be absent for some other compelling reason (including religious reasons) can apply to have his or her original grade replaced by a temporary "DEF" notation. The original grade assigned must include a "DNW" notation.
- A "DEF" notation cannot be assigned in a course with an "R" or "NR" notation.
- Application forms for "DEF" notations are available from the Birks Student Service Centre. A completed application must be submitted to the Birks Student Service Centre, not to the instructor, Department, or Faculty, by January 15 for Fall courses (/2), May 15 for Fall/Winter courses (/3 and /4) or August 31 for Summer courses (/1). The application must be accompanied by a medical certificate on a physician's original letterhead for medical situations or, if the reasons are not medical, by other appropriate documents indicating that the student was unable to write an examination on the day or days in question.
- The application for a "DEF" notation must be accompanied by a \$15 per course processing fee.
- The Registration and Examinations Office is entitled to ask the student to provide additional medical information. In such cases the student will be supplied with a form to be completed by his or her physician.
- When the Registration and Examinations Office approves the awarding of the "DEF" notation, it will temporarily replace the student's original grade for the course or courses concerned. The student is then entitled to write a deferred examination. For information about deferred examinations, see §16.3.9 II.
- When the deferred examination has been completed and evaluated, a new grade will replace the "DEF" notation.
- When a student receiving the privilege of writing a deferred examination does not write the examination during the specified period, the privilege will be withdrawn and a final grade in the course will be recorded by the Office of the Registrar according to the grade achieved by the student before the "DEF" notation was granted.
- When a student repeatedly submits medical certificates, the University reserves the right to refer him or her to a physician appointed by the University for a recommendation.

Medical "MED" Notations

- A student who has missed an examination due to a long-term medical situation can apply to have his or her original grade replaced by a "MED" notation. The original grade must include the "DNW" notation.
- A "MED" notation cannot be assigned in a course with an "R" grade or "NR" notation.
- Application forms for "MED" notations are available from the Birks Student Service Centre. A completed application should be submitted to the Birks Student Service Centre, not to the instructor, Department, or Faculty, by January 15 for Fall courses (/2), May 15 for Fall/Winter courses (/3 and /4), or August 31 for Summer courses (/1). The application must be accompanied by a medical certificate on a physician's original letterhead indicating that a long-term medical situation prohibited the student from being able to complete the final examination on the day or days in question.
- The application for a "MED" notation must be accompanied by a \$15 per course processing fee.
- The Registration and Examinations Office is entitled to ask the student to provide additional medical information. In such cases the student will be supplied with a form to be completed by his or her physician.
- When the Registration and Examinations Office approves the acceptance of a medical certificate, the notation "MED" will replace the student's original grade for the course or courses concerned. For information about "MED" replacement examinations, see §16.3.9 II.
- When the replacement examination or missing work has been completed and evaluated, a new grade will replace the "MED" notation. If the student does not write a replacement examination or complete the missing work, the "MED" notation will appear permanently on his or her record and transcript (e.g. "MED/DNW" or "MED/INC"). "MED" notations carry no grade point value. Courses with "MED" notations are not included in assessments of academic standing.
- When a student repeatedly submits medical certificates, the University reserves the right to refer him or her to a physician appointed by the University for a recommendation.

Supplemental Examinations - Regulations

- Each Faculty determines for which of its courses a supplemental examination is offered.
- A student must be in acceptable standing in order to write a supplemental examination.
- A student is permitted to write only one supplemental examination for a course, whether or not the course is being repeated.
- A student who has received a passing grade for a course may not write a supplemental examination for that course.
- A student who has received an "NR" or "R" grade may not write a supplemental examination for

- Applications to write supplemental examinations are available from the Birks Student Service
 Centre. A completed application should be submitted to the Birks Student Service Centre,
 not to the instructor, Department, or Faculty, by June 15 for Fall/Winter courses (/2, /3 and /4),
 September 21 for Summer courses (/1) or February 1 for Graduating students (Fall-term courses
 [/2] only).
- The application for a supplemental examination must be accompanied by a \$25 fee for each course. The supplemental fee is refundable only if the student is denied permission to write the supplemental.

16.3.8 Academic Re-evaluation

General

- Concordia University affirms the right of students to request the re-evaluation of course work
 which includes tests, examinations, essays and other work that has contributed to the grading
 of a course. It is assumed that initiating a formal re-evaluation ("a re-evaluation request") is a
 last recourse, taken when prior and sincere attempts to resolve problems and disagreements
 informally and directly have failed.
- Students have the right to see their course work. Students are responsible for the preservation of any material, in its entire and original form, which has been returned to them. A re-evaluation request may be refused if this material is not available.
- 3. Instructors are responsible for the preservation of course work that has not been returned to students as follows: until December 31 of the next calendar year for Fall-term courses; until April 30 of the next calendar year for Fall/Winter and Winter-term courses; and until August 31 of the next calendar year for Summer-term courses.
- 4. In cases where grades are received for activities other than written or artistic course work, such as class participation, oral presentations, oral examinations and performance, no re-evaluation is normally possible. However, every attempt shall be made by the instructor concerned and the Chair of the Department to address the concerns raised by the student.
- The grounds for a re-evaluation request are restricted to claims that i) a miscalculation of the grade occurred; or ii) the evaluation of the work was demonstrably unfair.
- 6. A grade may be maintained, raised or lowered as a result of a re-evaluation request.

II. Procedure

- 7. Students who are dissatisfied with the grade received on one or more pieces of course work shall first attempt to meet with the instructor and explain their position. If the student remains dissatisfied or is unable to meet with the instructor, he or she may, upon receiving the final grade for the course, make a re-evaluation request.
- A re-evaluation request shall be made on an "Academic Re-evaluation Request" form available at the Birks Student Service Centre. The student shall specify the reasons for seeking the re-evaluation and shall indicate what informal attempts towards re-evaluation have been made. A processing fee must accompany the request. (See the Tuition and Fees section of this Calendar for the current fee).
- A re-evaluation request with respect to a Fall-term course must be made no later than the following February 1; with respect to a Fall-Winter or Winter-term course, no later than the following June 15 and with respect to a Summer-term course, no later than the following October 1. These deadlines may be extended by the Registrar in particular cases if the student can provide evidence that he or she was unable to have acted within the deadlines.
- 10. The Registrar shall forward the re-evaluation request to the Chair of the appropriate Department.
- 11. The Chair shall decide whether the re-evaluation request conforms to the criteria outlined in articles 4 and 5 above within ten (10) days of receiving the re-evaluation request.
- 12. If the Chair decides that the re-evaluation request does not conform to the criteria outlined in articles 4 and 5 above, he or she shall communicate this decision with reasons, in writing, to the student with a copy to the Registrar. Should the student disagree with this decision, he or she has the right to appeal the Chair's decision to the Re-evaluation Appeals Committee as set out in article 24 below.
- Requests for review or other consideration which do not conform to the grounds for a re-evaluation request may fall under the purview of the Chair, the Dean, the Student Request Committee or other mechanisms.
- 14. If the Chair decides that the re-evaluation request conforms to the criteria outlined in articles 4 and 5 above, he or she shall appoint a re-evaluator whose name shall be communicated to the student and to the instructor concerned. Normally, the re-evaluator shall not be an instructor in whose course the student is registered at that time.
- 15. Before the re-evaluation begins, the instructor shall provide the Chair with information regarding the nature and structure of the course as well as the evaluation criteria and methods used. The Chair shall communicate this information to the re-evaluator.
- 16. The entire piece of work identified by the student shall be re-evaluated. The re-evaluator may request additional input from the student or the instructor.

- 17. The re-evaluation shall normally be completed within thirty (30) days of the Chair's decision that the re-evaluation shall proceed. If it becomes clear that the thirty (30) day delay cannot be met, the Chair shall immediately communicate this information to the student in order to determine whether any serious difficulties may arise from extending the delay. In the case where the thirty (30) day delay is extended, every effort shall be made to remedy any academic disadvantage that the student may experience as a consequence of the extension of the delay.
- 18. Upon completion of the re-evaluation, the re-evaluator shall assign a grade to the work in question and shall forward the re-evaluated material to the Chair along with a reasoned report. The Chair shall communicate the re-evaluation decision, in writing, to the student, the instructor and the Registrar, as well as whether the final grade for the course will be modified as a result of the re-evaluation decision. This communication shall include the re-evaluator's report which shall make mention of the documentation and methodology used by the re-evaluator.
- 19. In cases where there is a significant discrepancy between the original grade assigned and the grade assigned by the re-evaluator, the Chair may convene a meeting with the instructor and the re-evaluator in order to discuss the issue before communicating the decision to the parties concerned. If disagreement as to the discrepancy remains after the meeting, the re-evaluator's grade shall stand.
- 20. In cases where the re-evaluation decision reveals a generalized flaw in the original evaluation process, the Chair shall take appropriate steps to ensure that the grades of other students in the course are reviewed and modified if appropriate.
- 21. A final grade that is modified as a result of the re-evaluation shall be entered onto the student's academic record and transcript. If no appeal is filed, the modified grade shall permanently replace the original grade on the student's academic record and transcript. If an appeal is filed, an interim notation to the effect that the grade is "under appeal" shall accompany the modified grade until the final disposition of the case.

III. Appeals

- 22. For the purposes of appeals under these procedures, the Senate Appeals Committee on Academic Misconduct shall function as a Re-evaluation Appeal Committee (RAC).
- 23. A student or instructor may appeal a re-evaluation decision based only on the presence of serious and prejudicial procedural defects. The appeal must state in clear and precise terms the grounds on which the appeal is based. Such an appeal must be made, in writing, to the Secretary of the RAC within fifteen (15) days of receipt of the re-evaluation decision.
- 24. A student may appeal a Chair's decision that the re-evaluation request did not conform to the criteria outlined in articles 4 and 5 above. This appeal may be based on either substantive grounds or on the presence of serious and prejudicial procedural defects in the Chair's consideration of the re-evaluation request. The appeal must state in clear and precise terms the grounds on which the appeal is based. Such an appeal must be made, in writing, to the Secretary of the RAC within fifteen (15) days of the student's receipt of the Chair's decision.
- 25. Upon receipt of the appeal, the RAC shall send a copy to the Registrar, the Chair, the instructor and the re-evaluator, if appropriate. All documentation submitted by the student, as well as any other relevant documentation and any comments that the Registrar, the Chair and the re-evaluator, if appropriate, may have, shall be forwarded to the RAC.
- 26. The RAC shall render a decision, based on the written record only, normally within twenty (20) days of the filing of an appeal. The RAC shall meet at least once in person before rendering its reasoned decision.
- 27. In the case of an appeal of a re-evaluation decision, should the Committee determine that serious and prejudicial procedural defects were present in the re-evaluation process, it shall instruct the Chair to arrange for a new re-evaluation.
- 28. Should the RAC decide that an appeal be upheld in the case of an appeal of a Chair's decision that the re-evaluation request did not conform to the criteria outlined in articles 4 and 5 above, it shall instruct the Dean to arrange for a re-evaluation independent of the relevant Chair.
- 29. The RAC shall communicate its reasoned decision to the student, the instructor, the re-evaluator (if appropriate), the Chair and the Registrar and shall include copies of all documentation considered.
- 30. The decision of the Committee is final.

IV. Miscellaneous Provisions

- 31. The word "days" is defined as working days which excludes weekends, holidays and other days during which the University is closed.
- 32. Any written notice addressed to a student or instructor under these procedures shall be sent by regular mail to the last address provided to the University and shall be deemed to be received five (5) days after sending.
- 33. If the course in question was taught by the Chair, the Dean shall assume all of the duties imposed on the Chair in these procedures. If the course in question does not form part of a department, the re-evaluation request shall be forwarded to the appropriate administrator responsible for the course.

34. The overall responsibility for the implementation and recommended amendments to these procedures shall rest with the Provost and Vice-Rector, Research.

Students must present identification in order to write any examination. Accordable identification is:

16.3.9 Examinations

Students must present identification in order to write any examination. Acceptable identification is: Concordia student I.D. card; photo- and signature-bearing Medicare card or driver's license.

I. Final Examinations

- 1. Academic Calendar §11 lists the official examination periods.
- Examination schedules are posted outside H 110 (SGW Campus) and CC 214 (LOY Campus) and at touch-screen terminals at AD 211 (LOY Campus), outside H 110 (SGW Campus), and in the J.W. McConnell Library Building Atrium (SGW Campus).
- Since special arrangements cannot be made in the event of personal time conflicts, students should not make personal commitments for the examination periods until after the final schedule is posted.
- 4. When the final examination schedule indicates that a student has a "conflict", i.e. must write examinations in three consecutive time blocks (e.g. morning, afternoon and evening or afternoon, evening and morning or two at the same day and time), information is available on the touch-screens at AD 211 (LOY Campus), outside H 110 (SGW Campus) and in the J.W. McConnell Library Building Atrium (SGW Campus). The Registration and Examinations Office will make every effort to reschedule or defer one of the examinations provided they are advised by the deadline.
- 5. No candidate will be permitted to enter an examination room one hour after the examination period has begun, or to leave during the first hour of the examination.
- 6. If during the course of an examination a student becomes ill, the student should report at once to the invigilator, hand in the unfinished paper and request that it be cancelled. Before leaving the University, the student must also visit the Temporary Examinations Office location in order that a report of the situation may be filed. If physical and/or emotional ill-health is the cause, the student must then report at once to a physician/ counsellor so that subsequent application for a deferred examination is supported by medical documentation.
- If a student completes an examination, even though he/she is ill or faced with other personal problems or situations, the subsequent grade obtained in the course must stand. Petitions on the grounds of illness will not be considered.
- In the Fall and Winter terms, no tests or examinations are permitted in the final week of classes. Any exceptions must be approved in advance by the appropriate Faculty Council.

II. Deferred, Replacement and Supplemental Examinations – Regulations

1. Deferred Examinations

- A student who did not write a final examination and has been granted a "DEF" notation is permitted to write a deferred examination.
- b) A deferred examination counts for the same weight in the course evaluation scheme and covers the same course material as the original examination.
- A student (unless registered in an Engineering programme) who does not write a deferred examination for medical or other valid reasons as identified in §16.3.7 may apply to write another deferred examination within the following deadlines:

January 15: for deferred examinations missed in October or December May 15: for deferred examinations missed in February or April

August 31: for deferred examinations missed in June or August

- A student who does not write either of the two scheduled deferred examinations for the same course for medical or other serious reasons, must repeat the course to obtain credit. (Students in Engineering programmes have only one opportunity to write a deferred examination.) Such students are not eligible to write a supplemental examination.
- When a student does not write a deferred examination without acceptable medical or other valid reasons, no further examination, deferred or supplemental, will be scheduled.
- f) When a deferred examination is not written, the original grade assigned in the course prior to the granting of the "DEF" notation will be re-instated on the student record and transcript.
- g) When a deferred examination has been written and evaluated, the mark is added to the student's marks for other course work. The resulting final grade will replace the "DEF" notation on the student's academic record and transcript.
- h) A student (unless registered in an Engineering programme) who fails a course after writing a deferred examination, may have one opportunity to write a supplemental examination during the next scheduled supplemental examination period provided the original grade was not "FNS".
- A student cannot write a deferred examination in a course with a grade of "R" or "NR".

2. Replacement Examinations

- A student who did not write a final examination and has been granted a "MED" notation is permitted to write a replacement examination.
- A replacement examination counts for the same weight in the course evaluation scheme and covers the same course material as the original examination.
- A student (unless registered in an Engineering programme) who does not write a replacement examination for medical or other valid reasons may apply to write another replacement examination within the following deadlines:

for replacement examinations missed in October or December May 15: for replacement examinations missed in February or April August 31: for replacement examinations missed in June or August

- A student who does not write either of the two scheduled replacement examinations for the same course for medical or other serious reasons, must repeat the course to obtain credit. (Students in Engineering programmes have only one opportunity to write a replacement examination.) Such students are not eligible to write a supplemental
- When a student does not write a replacement examination without acceptable medical or other valid reasons, no further examination, replacement or supplemental, will be scheduled.
- When a replacement examination is not written, the "MED" notation (e.g. "MED/DNW") will appear permanently on the student record and transcript.
- When a replacement examination has been written and evaluated, the mark is added to the student's marks for other course work. The resulting final grade will replace the "MED" notation on the student's academic record and transcript.
- A student (unless registered in an Engineering programme) who fails a course after writing a replacement examination, may have one opportunity to write a supplemental examination during the next scheduled supplemental examination period provided the original grade was not "FNS".
- i) A student cannot write a replacement examination in a course with a grade of "R" or "NR".

Supplemental Examinations

- A student who applied for and satisfies all the requirements is permitted to write a supplemental examination.
- Whether or not a supplemental examination is written, the original grade for the course ("F", "F/DNW") will remain permanently on the student's academic record and transcript.
- The grade for a supplemental examination is counted as a second attempt at the course. The grades from both attempts are included in calculating Grade Point Averages and assessments of academic standing.
- A student who fails a supplemental examination is given a grade of "R". A student who does not write a supplemental examination is not assigned a second failing grade for the course.
- With the exception of students registered in an Engineering programme, a student who does not write a supplemental examination for medical, or other serious reasons, may re-apply to write the supplemental examination for that course during the next scheduled supplemental examination period. The deadline dates are as follows:

January 15: for supplemental examinations missed in October May 15: for supplemental examinations missed in February August 31: for supplemental examinations missed in August

A student who does not write either of these supplemental examinations for medical or other serious reasons, must repeat the course to obtain credit. (Students in Engineering programmes have only one opportunity to write a supplemental examination.)

III. Deferred, Replacement and Supplemental Examination Periods

Deferred, replacement and supplemental examinations are written at various times throughout the year.

Deferred/Replacement Examinations

- Faculty of Commerce and Administration: Deferred examinations for courses offered in this Faculty are written the next time the course is offered.
- Faculties of Arts and Science, Engineering and Computer Science, Fine Arts: Deferred examinations for courses in these Faculties are written during the next regular examination period provided the course is given in the next semester and that a final examination is

If there is no examination scheduled for the course in question in the subsequent examination cycle, the deferred examination would be scheduled during the next deferred examination period (February [mid-term break], August, October).

Supplemental Examinations

Faculty of Commerce and Administration: There are no supplemental examinations available for courses offered in this Faculty.

- Faculties of Arts and Science, Engineering and Computer Science, Fine Arts: Supplemental examinations for Fall/Winter courses (/2, /3, and /4) are normally written in late August. For Summer session courses (/1) supplemental examinations are usually written in October. Graduating students may write supplemental examinations in February for Fall courses (/2) only.
- In some circumstances, a student who will not be in the Montréal area during the deferred, replacement or supplemental examination period can write his/her examination at another Canadian university or college. A student who wishes to write at an external centre must obtain a request form from the Birks Student Service Centre and pay the necessary processing fee of \$10 for mailing and handling. The student is responsible for any fees that may be charged by the external university.

16.3.10 Academic Performance

Performance Regulations

Students are required to maintain an acceptable standard of scholarship. Each student's academic standing is assessed at the end of every year, either on the basis of an Annual Weighted Grade Point Average (WGPA) as defined below, or for students in the Faculty of Fine Arts, on the basis of the ratio of credits failed to credits passed.

The specific regulations applicable to students registered in each Faculty can be found in the following sections of the Calendar:

Faculty	See Calendar Section	System <u>Used</u>
Faculty of Arts and Science Faculty of Commerce and Administration Faculty of Engineering and Computer Science	31.003.1 61.20.5 71.10.3	WGPA WGPA WGPA
Faculty of Fine Arts	81.20.4	No. of Failures

These regulations may be modified in the case of students transferring either between Faculties or from another university.

II. Weighted Grade Point Average

Annual Grade Point Average

An Annual Weighted Grade Point Average (WGPA) for each student is calculated at the end of each academic year (including the Summer, Fall and Winter terms), provided that the student has attempted a minimum of 12 credits. If the student has attempted fewer than 12 credits, these credits will be included in the assessment for the following academic year.

When a student transfers from one degree or certificate to another degree or certificate, the WGPA is calculated only for courses recorded in the current degree or certificate. Special regulations for graduating students may be specified in each Faculty's regulations.

Grades for supplemental and replacement examinations and for late completion of courses with "INC" or "MED" notations are included in the assessment period in which they are recorded.

In the Faculty of Engineering and Computer Science, prerequisite courses required for admission to a programme will not be counted unless they are specifically listed on the student's acceptance letter. The WGPA is calculated as follows:

First, for each course attempted, the number of credits for the course is multiplied by the grade points obtained for the course, as specified in §16.3.3. Then, the sum of the grade points for all courses is divided by the total credits attempted.

WGPA = Σ (course credits X grade points) Σ (credits attempted)

 Σ = sum of

Example:	Grade	Credit		Grade	W	eighted
Course	Achieved	Value		Points*		Points
1	D	3.00	Χ	1.00	=	3.00
2	C+	3.00	Χ	2.30	=	6.90
3	В	2.00	Χ	3.00	=	6.00
4	A-	6.00	Χ	3.70	=	22.20
5	F	3.00	Χ	0.00	=	0.00
	Total Credits	17.00			Total Weighted	38.10
	Attempted				Grade Points	

WGPA =
$$\frac{38.10}{17.00}$$
 = 2.24

^{*} As detailed in §16.3.3

b) Cumulative Grade Point Average

This is the running total of the GPA since a student was admitted to the most recent degree (or certificate) programme. It includes the same courses as were included in the calculation of the Annual Weighted Grade Point Average, but it does not include the grade point weighting of courses which were completed in an earlier programme, for which "transfer credit" has been awarded in the new programme.

c) Final Graduation Grade Point Average

This is a cumulative GPA of all courses applicable to the new degree programme being completed to which special rules apply (e.g. repeated courses and transferred courses are treated differently than they are in the Annual or Cumulative GPA calculations). This GPA is calculated and recorded on the record only when a student graduates.

The Final Graduation GPA is used as the basis to determine eligibility for High Academic Achievement (§16.3.11).

III. Qualifying Programmes and Visiting Students

Students registered in Qualifying Programmes or as Visiting students are subject to the regulations of the Faculty in which they are registered.

IV. Independent Students

- Independent students are subject to the same Grade Point Average requirements as students registered in programmes offered by the Faculty of Arts and Science. (See §31.003.1)
- Independent students who are classified as failed may not re-register without permission of the Registrar.

V. Regulations for Failed Students and Students in Conditional Standing

- Failed students or students in conditional standing are not eligible to write supplemental examinations.
- 2. Undergraduate students who are classified as failed may not re-register as Independent students.

VI. Recording of Failed and Conditional Standing

Failed standing is noted on the student's academic record and transcript. In the event that a student is subsequently readmitted, previous failed standing will appear only on the record. Conditional standing is noted on records only.

16.3.11 High Academic Achievement A degree "With Distinction" or "With Great Distinction" will be awarded to students who obtain Graduation Grade Point Averages (GGPA) of at least 3.40 or 4.00 respectively.

The Graduation Grade Point Average is calculated over courses taken in the regular programme, as determined by guidelines of the Office of the Registrar. Additional credits in extended programmes are not normally included in any calculation. In the case of transfer students, all courses taken at Concordia will be included in calculating the Graduation GPA.

16.3.12 Repetition of Courses

- . In general, a student may repeat a failed course only once. However, a student who fails a required course twice may appeal to the appropriate Student Request Committee for permission to take the course a third time or for permission to replace the course with another. Unless permission is granted, the student will not be allowed to continue in the University towards that programme and/or degree.
- 2. A student who has received a passing grade for a course may repeat the course for personal reasons (e.g. to meet an external requirement). The student's record and transcript will include both grades but the second grade will carry no credit value. The original grade for the course will be used for calculating the Graduation GPA and the Cumulative GPA. For students in the Faculty of Engineering and Computer Science who have been required to repeat courses graded "D", both grades are included in the Graduation GPA.
- 3. A student who fails a required course must repeat the course during the next session for which she or he registers. If a student fails a required course in the Summer Session and a supplemental examination is available, re-registration for the course may be postponed until after the supplemental examination period for summer-session courses.

I. Preamble Introduction

16.3.13 Code of Conduct (Academic)

The integrity of University academic life and of the degrees, diplomas and certificates the
University confers is dependent upon the honesty and soundness of the instructor-student
learning relationship and, in particular, that of the evaluation process. As such, all students are
expected to be honest in all of their academic endeavours and relationships with the University.

Jurisdiction

- For the purposes of this Code, the student need only have been a student at the time of the alleged offence.
- If, prior to the initiation of any proceedings under this Code, the student has graduated, the proceedings shall continue.

Ambiguity

4. Wherever there is doubt or ambiguity regarding any provision of this Code or the procedure to be followed, that interpretation or procedure which appears to be most equitable and consistent with the general purposes and philosophy of this Code shall be adopted. Except for those terms specifically defined in this Code, the terms used shall have their usual meanings.

II. Definitions

Student

- 5. Student is defined as:
 - any person registered in the University whether for courses or research and whether or not a candidate for a degree, diploma or certificate;
 - i. persons once registered in the University who are under suspension from the University;
 - iii. persons registered during a preceding academic term.

Days

Days is defined as working days which excludes weekends, holidays and other days during which the University is closed.

Dean

- 7. Dean is defined as:
 - the Dean of the Faculty offering the programme in which the student is registered; or
 - ii. if the student is not registered in a programme, the Dean of the Faculty providing the course concerned or in the event that the offence is not related to a particular course, the Dean of the Faculty providing the most credits on the student's record; or
 - iii. if the student is a graduate student, the Dean of Graduate Studies and Research. The Dean may delegate an Associate or Vice-Dean to fulfil any of his or her obligations under this Code. If the course concerned is taught by the Dean, the Provost and Vice-Rector, Research shall assume all of the duties imposed on the Dean in this Code.

Invigilator

 Invigilator means an instructor or any other person who is charged with supervising an evaluative exercise.

Examination

Examination means any evaluative exercise including tests, quizzes and like assignments as
well as site supervised examinations and non-site supervised examinations as outlined in
articles 18 and 19 of this Code.

III. Offences

- 10. Any form of cheating, plagiarism, personation, falsification of a document as well as any other form of dishonest behaviour related to the obtention of academic gain or the avoidance of evaluative exercises committed by a student is an academic offence under this Code.
- 11. Any attempt at or participation related in any way to an academic offence is also an offence under this Code and shall be dealt with in accordance with the procedures set out in this Code.
- 12. Without limiting the generality of article 10 above, academic offences include, but are not restricted to, the carrying out or attempting to carry out or participating in:
 - personation assuming the identity of another person or having another person assume one's own identity;
 - ii. plagiarism the presentation of the work of another person as one's own or without proper acknowledgement;
 - iii. the contribution by one student to another student of work with the knowledge that the latter may submit the work in part or in whole as his or her own;
 - iv. multiple submission the submission of a piece of work for evaluative purposes when that work has been or is currently being submitted for evaluative purposes in another course at the University or in another teaching institution without the knowledge and permission of the instructor or instructors involved;
 - v. the obtention by theft or any other means of the questions or answers of an examination or of any other University-related resource that one is not authorized to possess:
 - vi. the possession or use during an examination of any non-authorized documents or materials or possessing a device allowing access to or use of any non-authorized documents or materials;
 - vii. the use of another person's examination during an examination;

- viii. communication with anyone other than an invigilator during an examination or the obtention of any non-authorized assistance during an examination;
- tearing or mutilating an examination booklet, inserting pages into a booklet or taking a booklet from the examination room;
- the falsification of a document, in particular a document transmitted to the University or a document of the University, whether transmitted or not to a third party, whatever the circumstances;
- the falsification of a fact or research data in a work including a reference to a source which has been fabricated. Falsification shall not include those factors intrinsic to the process of academic research such as honest error, conflicting data or differences in interpretation or judgement of data or of experimental design.

IV. Procedures

Provisions Governing Examinations

- 13. It is the duty of an invigilator to take action under the following articles when he or she becomes aware of any suspected academic offence.
- 14. Every examination paper shall expressly list the materials and equipment that a student is permitted to have and use during the examination and shall indicate any special conditions relating to the examination.
- 15. Except if expressly authorized by the invigilator, a student may not speak or otherwise communicate with any person other than an invigilator.

Centrally Supervised Examinations

- 16. Where an examination is supervised by the Office of the Registrar or where another central supervisory function is available to deal with allegations of offences related to examinations, a student who is suspected of an academic offence shall be so informed by the invigilator and shall be required to leave the examination area.
- 17. The student shall be requested, in a written statement, to choose one of the following options:
 - to withdraw from the examination with the understanding that if the charge is dismissed, the student shall be permitted to take another examination for the same course at a mutually agreed upon time but no later than one calendar year from the date of the filing of the Incident Report;
 - to continue the examination under controlled conditions in another location in which case the invigilator shall provide a fresh examination booklet and shall allow additional time for the examination to compensate for any time lost. The student shall continue the examination from the point at which he or she was required to leave the examination area.
- 18. Should the student not indicate a choice, he or she shall be considered to have chosen to withdraw from the examination. Until such time as the student has indicated that he or she has chosen to withdraw from the examination or is deemed to have done so, he or she remains under examination conditions.
- 19. The invigilator shall file an Incident Report with the Dean and shall include the student's examination booklet as well as any other evidence related to the suspected academic offence.

Other Examinations

20. Where an examination is not supervised by the Office of the Registrar or where another central supervisory function is not available to deal with allegations of offences related to examinations, a student who is suspected of an academic offence shall be so informed by the invigilator and shall be required to leave the examination area immediately. The invigilator shall file an Incident Report and shall include the student's examination booklet as well as any other evidence related to the suspected academic offence.

Non-Examination Related Offences

- 21. An instructor who, in the course of grading a student's work or through any other means, has reasonable grounds to believe that a student in the instructor's course or working under his or her direction has committed a non-examination related offence shall complete a Code of Conduct (Academic) Incident Report ("Incident Report"). The instructor shall forward the Incident Report to the Dean. The instructor may not, on his or her own authority, impose a sanction on the student. Pending the final outcome of any proceedings under this Code, the instructor shall withhold the grade for the course, if applicable.
- 22. Any administrator of the University who to his or her personal knowledge or upon reliable report has reasonable grounds to believe that a student has committed a non-examination related offence shall complete an Incident Report. The administrator shall forward the Incident Report to the Dean. The administrator may not, on his or her own authority, impose a sanction on the student.

Interviews

23. Upon receipt of an Incident Report, the Dean shall send a copy to the student, the Registrar and the Secretary of the Academic Hearing Board and shall indicate whether he or she intends

- to interview the student to inquire into the alleged offence or whether the Incident Report is being transmitted directly to the Academic Hearing Board. The Dean shall, as well, include a
- 24. Should the Dean decide to interview the student, the interview shall take place within fifteen (15) days of the Dean's receipt of the Incident Report. Whenever possible, five (5) days notice shall be given to the student before the interview. In convening the interview with the student, the Dean shall inform the student of his or her right to consult any person and to be accompanied or represented by an adviser from Advocacy and Support Services or any other member of the University community.
- 25. At the outset of the interview, the Dean shall inform the student that he or she is not obliged to answer any of the Dean's questions and that any answers given may become the basis for an immediate disposition of the case under article 26 or cause the Dean to refer the case to the Academic Hearing Board or be the subject of testimony by the Dean at any subsequent
- 26. Within ten (10) days from the conclusion of the interview, the Dean shall write to the student indicating his or her decision to dismiss the charge or to impose one or more of the following sanctions:
 - Reprimand the student;
 - Direct that a piece of work be re-submitted;
 - iii. Enter a failing grade for the piece of work in question or for the course, if applicable;
 - iv. Enter a failing grade and ineligibility for a supplemental examination or any other evaluative exercise for the course;
 - Impose the obligation to take and pass courses of up to twenty-four (24) credits in addition to the total number of credits required for the student's programme as specified by the Dean. If the student is registered as an Independent student, the sanction will be imposed only if he or she applies and is accepted into a programme;
 - Impose specified community service at the University of up to ten (10) hours per week for a specified period of time;
 - Refer the case to the Academic Hearing Board.
 - In the case of a student who has graduated, the only two available sanctions are i) a notation on the student's academic record that he or she has been found guilty of academic misconduct; or ii) a recommendation to Senate for the revocation of the degree obtained. Where the Dean has decided to dismiss the charge, the Dean shall direct the instructor to
 - submit a grade for the course in question, if applicable.
- 27. In the case of a sanction imposed by the Dean under article 26, the letter to the student shall inform him or her of the right to obtain a full hearing before the Academic Hearing Board by notifying the Secretary of the Academic Hearing Board within ten (10) days of the student's receipt of the Dean's decision. A copy of the Dean's letter shall be sent to the Secretary of the Academic Hearing Board, the Registrar and the instructor, if appropriate.
 - When the Dean has decided to dismiss the charge against the student, a copy of the letter dismissing the charge shall be sent to the Secretary of the Academic Hearing Board.
- 28. Where the Dean has imposed a sanction under article 26 and the student has not elected to obtain a full hearing under article 27, the Secretary of the Academic Hearing Board shall, within a reasonable time, so notify the Dean and the Dean shall file a report with the Registrar containing the following:
 - identification of the student concerned;
 - a statement of the facts and findings;
 - a statement of the course of action taken;
 - a statement to the effect that the student concerned was notified in writing of the action taken and of his or her right to a full hearing before the Academic Hearing Board. Such report shall form a part of the student's permanent file maintained by the Registrar.
- 29. When the student has elected to obtain a full hearing under article 27, the execution of any decision of the Dean shall be suspended pending disposition by an Academic Hearing Panel. In such cases, the imposition of the sanction of a failing grade shall not be taken into account when calculating the student's grade point average.
- 30. When the Dean has decided not to interview the student and to transmit the Incident Report directly to the Academic Hearing Board such transmission shall take place within fifteen (15) days of receipt of the Incident Report.

Composition of the Academic Hearing Board

- 31. The members of the Academic Hearing Board shall be appointed by Senate for two-year staggered terms effective June 1 of each year and shall consist of:
 - Ten (10) faculty members (two [2] nominated by each Faculty Council and the Council of the School of Graduate Studies):
 - Ten (10) students (seven [7] nominated by the Concordia Student Union and three [3] nominated by the Graduate Students' Association);
 - Senate shall, as well, appoint a Chair and Vice-Chair from the faculty members.

- 32. A permanent Secretary of the Academic Hearing Board (the Secretary) shall be appointed by the Secretary-General. The Secretary shall be responsible for the administrative functioning of the Academic Hearing Board and shall maintain the confidential files and the recordings of the Academic Hearing Board.
- 33. An Academic Hearing Panel (AHP) of five (5) Academic Hearing Board members consisting of the Chair or Vice-Chair, two (2) faculty members and two (2) students shall be selected for a given hearing by the Secretary as required. Every attempt will be made to select at least one (1) faculty member and one (1) student from the student's constituency (i.e. by faculty and undergraduate or graduate).
- 34. In the event that an AHP cannot be convened from the membership of the Academic Hearing Board, the Provost and Vice-Rector, Research shall designate the membership of the AHP.

Procedures Before an Academic Hearing Panel

- 35. Once a matter has been referred to the Secretary, he or she shall convene an AHP to hear the matter. Thereafter, the Secretary shall be responsible for all communications with the parties.
- 36. A hearing shall be convened as soon as possible after the receipt by the Secretary of the notification and normally within fifteen (15) days. Once a hearing date is fixed by the Secretary, the parties shall submit any documentation they wish considered to the Secretary no later than ten (10) days before the scheduled hearing date. Such documentation shall include any supporting documents and a list of the witnesses, if any, that will appear. The Secretary shall transmit the documentation, together with a list of the Panel members selected for the case, to the parties no later than five (5) days before the scheduled hearing date.
- 37. Either party may object to the participation of a Panel member on the grounds of potential bias. A reasoned objection shall be filed with the Secretary who shall arrange for an alternate Panel member to serve if he or she determines that the objection is well-founded. If the Secretary feels that the objection is frivolous and the matter cannot be resolved, the issue shall be forwarded to the Chair or Vice-Chair of the Academic Hearing Board who shall render a final decision in this regard.

The Hearing

- 38. The AHP shall establish its own rules of procedure. Minimally, these rules shall provide for opening statements by the parties, evidence and witnesses called by the parties (expert or otherwise), the right of cross-examination, questioning by members of the AHP, representations with respect to desired sanctions and closing statements. Hearings shall be recorded and the cassettes kept as part of the permanent record of the proceedings for a period of not less than five (5) years.
- 39. The role of the Chair or Vice-Chair shall be to preside over the proceedings, keep order and ensure fairness. The Chair or Vice-Chair shall, as well, preside over the deliberations of the AHP and shall have a vote in the case of a tie only. Decisions shall be by majority vote. The hearing shall be closed unless both parties have consented in writing to the attendance of members of the University community.
- 40. The instructor in the course in which the offence took place, if applicable, may be present throughout the hearing or may be called as a witness by either of the parties.
- 41. If the student fails, without reasonable excuse, to attend the hearing, the hearing may proceed in the student's absence or, at the Chair or Vice-Chair's discretion the start of the hearing may be postponed. If the hearing proceeds in the student's absence, all rights contingent on the student's presence, with the exception of the right to have an adviser present to plead for postponement, are forfeited. In such a case, a student's right of appeal is limited to a consideration of the reasonableness of his or her excuse for not appearing. If an Appeals Committee finds that the excuse is reasonable, it shall order a new hearing by a new AHP with the student present. The decision of the new hearing with the student present is appealable as if it were a first hearing.
- 42. The decision of the AHP shall be signed, dated and reasoned and shall be sent to both parties. The standard of proof to be relied upon by the AHP shall be one of a "balance of probabilities".

Sanctions

- 43. Within ten (10) days from the conclusion of the hearing, the AHP shall write to the student and the Dean indicating its decision to dismiss the charge against the student or to impose one or more of the following sanctions:
 - a written reprimand:
 - a piece of work be re-submitted;
 - iii. specified community service at the University of up to ten (10) hours per week for a specified period of time;
 - iv. a failing grade for the piece of work in question or for the course, if applicable;
 - a failing grade and ineligibility for a supplemental examination or any other evaluative exercise for the course;

- vi. the obligation to take and pass courses of up to twenty-four (24) credits in addition to the total number of credits required for the student's programme as specified by the AHP. If the student is registered as an Independent student, the sanction will be imposed only if he or she applies and is accepted into a programme;
- vii. suspension for a period not to exceed six (6) academic terms. Suspensions shall entail the withdrawal of all University privileges, including the right to enter and be upon University premises:
- expulsion from the University. Expulsion entails the permanent termination of all University privileges.

In the case of a student who has graduated, the only two available sanctions are i) a notation on the student's academic record that he or she has been found guilty of academic misconduct; or ii) a recommendation to Senate for the revocation of the degree obtained.

- A sanction of suspension or expulsion is subject to confirmation by the Provost and Vice-Rector, Research.
- 45. Any student found to have committed a second academic offence shall be expelled from the University subject to confirmation by the Provost and Vice-Rector, Research.
- 46. The decision of the AHP shall inform the parties of their right to seek an appeal from the Senate Appeals Committee on Academic Misconduct (SACAM) within fifteen (15) days of receipt of the AHP decision. The AHP decision shall be transmitted to the Registrar, the Secretary of the SACAM and the instructor, if applicable.
- 47. Where neither the Dean nor the student has appealed to SACAM within the stipulated delay, the Secretary of the SACAM shall so inform the Registrar including a statement to the effect that the Dean and the student concerned were notified in writing of the action taken and of their right to seek an appeal from the SACAM. Such report shall form a part of the student's permanent file maintained by the Registrar. This notification shall be sent to the Dean and the student, the Secretary of the AHP and the members of the AHP who presided at the hearing of the case.
- 48. The execution of any sanctions by an AHP shall be suspended until the expiry of the delay to file an appeal or until the rendering of the decision by an Appeals Committee if an appeal is heard. In such cases, the imposition of the sanction of a failing grade shall not be taken into account when calculating the student's grade point average.

Appeals

- 49. The members of the SACAM shall be appointed by Senate for two year staggered terms effective June 1 of each year and shall consist of:
 - five (5) faculty members (one [1] nominated by each Faculty Council and the Council of the School of Graduate Studies);
 - ii. four (4) student members (two [2] nominated by the Concordia Student Union and two [2] nominated by the Graduate Students' Association);
 - iii. Senate shall, as well, appoint a Chair and Vice-Chair from the faculty members.
- 50. The Secretary of Senate shall act as the Secretary of the SACAM. The Secretary shall be responsible for the administrative functioning of SACAM and shall maintain the confidential files and the recordings of the SACAM.
- 51. An Appeals Committee of three (3) SACAM members consisting of the Chair or Vice-Chair, one (1) faculty member and one (1) student shall be selected for a given hearing by the Secretary of the SACAM as required. Every attempt will be made to select the student member from the student's constituency (undergraduate or graduate).
- 52. In the event that an Appeals Committee cannot be convened from the membership of the SACAM, the Provost and Vice-Rector, Research shall designate the membership of the Appeals Committee.
- 53. Should either the student or the Dean wish to appeal a decision or sanction of an AHP, he or she shall apply in writing to the SACAM for the authorization to lodge an appeal within fifteen (15) days of receipt of the AHP decision. An Appeals Committee shall decide whether an appeal shall be heard having regard to the circumstances of each case based on the written record.
- 54. Such request for authorization to appeal may be based only on the grounds of discovery of new evidence following the rendering of the decision of the AHP or on the presence of serious and prejudicial procedural defects. The request shall state in clear and precise terms the grounds on which the appeal is based. The Appeals Committee shall be provided with the complete file of the AHP and its decision shall be based on the written record only.
- 55. The Appeals Committee shall make a decision as to whether the authorization to appeal is granted within fifteen (15) days of receipt of the request.
- 56. If the authorization to appeal is granted, the appeal shall be heard either by the same Appeals Committee which authorized the appeal or by a new Appeals Committee as determined by the Chair of the SACAM within fifteen (15) days. Notification of such shall be sent to both parties.
- 57. The Appeals Committee has the authority to confirm, reverse or modify the decision being appealed. Further, should the appeal be based on the production of new evidence, the Appeals Committee may order a new hearing of the case by a new AHP.

- 58. The Appeals Committee shall render its decision within ten (10) days of the hearing. Any decision of the Appeals Committee shall be signed, dated and reasoned and shall be sent to both parties, the Secretary of the Academic Hearing Board, the Registrar, the instructor, if applicable and the members of the AHP who presided at the hearing of the case.
- 59. The decision of the Appeals Committee shall be final.
- 60. In the case of the denial of an appeal where the sanction imposed by the AHP was suspension or expulsion, the suspension or expulsion shall be retroactive to the date of the original decision by the AHP and shall take effect from the date of the Appeals Committee decision.

V. Miscellaneous Provisions

Delays

61. In the calculation of any delay set out in the Code, the months of July and August shall not be taken into account. In the case of a hearing before an AHP or an Appeals Committee that commenced before July 1, the regular delays set out in this Code shall apply.

62. Any written notice addressed to a student under this Code shall be sent by courier to the last address provided by the student to the University and shall be deemed to be received one (1) day after sending.

Notations on Academic Record and Transcript

- Sanctions of a failing grade in a course and more serious sanctions shall be reflected on the student's academic record with the additional notation of "for academic and disciplinary reasons".
- 64. Sanctions of a failing grade in a course, a failing grade in a course and further ineligibility for a supplemental examination and the obligation to take extra courses shall be reflected on the student's academic transcript without any additional notations.
- Suspensions imposed under this Code shall be recorded on the academic transcript as follows: "Required to withdraw for academic and disciplinary reasons. May not resume studies until [date]". At the date for resumption of studies, the notation shall be removed from the transcript but shall continue to appear on the student's academic record.
- 66. Any expulsion imposed under this Code shall be recorded on the academic transcript as follows: "Required to withdraw for academic and disciplinary reasons. May not apply for re-admission".
- 67. In cases where a sanction has been imposed but a student has requested either a full hearing before an AHP or an appeal to SACAM has not been disposed of, the notation on the record shall reflect the sanction but shall note that the sanction is "pending". In the case of a sanction of suspension or expulsion, the notation on the academic transcript shall note that the sanction is "pending".

Records and Confidentiality

- 68. The Registrar shall maintain a record in the student's official file with respect to all sanctions imposed under this Code.
- 69. Such record shall be kept in strictest confidence and shall only be communicated to the student concerned and to other persons within the University having a legitimate interest or duty to take communication of them.
- 70. Nothing contained in this section shall be interpreted as preventing the Registrar or any other University member from responding to a court order requiring the disclosure of information or statements obtained in the course of an interview or hearing conducted under this Code.

Annual Report

71. An annual report detailing the number of charges laid under this Code and their disposition shall be prepared by the Secretary of the Academic Hearing Board and presented to Senate by September 30 of each year. The report shall be published in the University's newspaper. In no circumstances shall any mention be made of the names of the parties involved nor of any information which might lead to their identification.

72. The members of the Academic Hearing Board, of the SACAM and the Deans or their delegates shall receive annual training prepared and conducted jointly by the Secretary of the Academic Hearing Board, the Director of Advocacy and Support Services and the University Legal Counsel.

Overall Responsibility for Code

73. The overall responsibility for the implementation and recommended amendments to this Code shall rest with the Secretary-General. The Secretary-General shall transmit an information sheet to each Dean and Chair at the beginning of each term outlining the general framework of this Code.

- 17.10 RIGHTS AND RESPONSIBILITIES
- 17.20 OMBUDS OFFICE

17.10

RIGHTS AND RESPONSIBILITIES

Advisor on Rights and Responsibilities SALLY SPILHAUS

Location

Sir George Williams Campus Office of Rights and Responsibilities Annex K, Room: 110 (514) 848-4857

CODE OF RIGHTS AND RESPONSIBILITIES

Scope

Code Applies to All Members of the University

This Code applies to all members of the University, that is, faculty members, administrative and support staff, and students. The process for the formal resolution of complaints made against students is distinct from the process for the formal resolution of complaints made against faculty members and administrative and support staff.

Contractors, Their Employees and Visitors

Contractors, their employees and representatives, and visitors to the University are expected to conduct themselves in any University-related activity in a manner consistent with this policy. Violations of this Code by such persons may be dealt with as potential breaches of contract or may result in suspension of University privileges, such as access to campus. Should such persons believe that they have been subjected to conduct on campus in violation of this Code, they may consult the Office of Rights and Responsibilities for advice.

Code Does Not Supersede Other Policies or Agreements

Nothing in this Code shall replace or supersede complaint, grievance or appeal procedures set out in any collective agreement to which Concordia University is a party, the Code of Conduct (Academic), the University Calendars or the University Policy Manuals.

Jurisdiction

Complaints with respect to a violation of this Code may be made by members of the University in relation to the conduct of other members where the complainant is directly affected by the conduct in question. As well, the University, through its designated officers, may make a complaint on its own behalf. The alleged violation must have taken place on University premises, either rented or owned, or on other premises, in the course of any Universitysponsored activity or event. Exceptionally, complaints may be made regarding an alleged violation that has taken place at another location, where the potential consequences of the violation may adversely affect the complainant's course of work or study at the University.

Preamble

Rights

All faculty members, administrative and support staff, and students may reasonably expect to pursue their work and studies in a safe and civil environment. Concordia University therefore does not condone discrimination, harassment, sexual harassment, threatening or violent conduct or offenses against property. Such conduct is defined in articles 15 to 19.

Responsibilities

All faculty members, administrative and support staff, and students are expected to refrain from violating this Code. Members of the University who have supervisory authority over others bear a particular responsibility to act in a timely and effective manner if they become aware of any violation of this Code.

Assistance From the Office of Rights and Responsibilities

This Code establishes the Office of Rights and Responsibilities, whose mandate is to assist University members in resolving incidents involving an alleged violation of this Code, in an effective and constructive manner. Such assistance is available both to individuals who believe that they have been subjected to conduct that violates this Code, and to those with supervisory authority who are called upon to respond to incidents of such conduct.

Complaints Subject to a Range of Responses

8. In keeping with its desire to settle conflicts in an effective and constructive manner, the University shall endeavour to seek an appropriate response to any alleged violations of this Code, ranging from the use of alternate methods of conflict resolution to formal procedures for adjudicating complaints. If a violation has occurred, every attempt shall be made to use remedies and sanctions that restore harmony, collegiality and cooperation between members.

Informing the Community

9. The Office of Rights and Responsibilities, together with the Advisory Committee on Rights and Responsibilities, shall undertake to inform all members of the University of the provisions of this Code and the services provided by the Advisor.

Fairness and Consistency

10. Complaints made under this Code shall be adjudicated in a manner that is consistent with the principles of natural justice and fair for all parties to the complaint, regardless of constituency. The principles of natural justice may be defined broadly as the obligation to hear the other side and to make a decision untainted by bias.

Academic Freedom

11. This Code is not to be applied in such a way as to detract from the right of faculty members, administrative and support staff, and students to engage in the frank discussion of potentially controversial matters, such as race, sex, sexual orientation, politics or religion. Further, the Code should not be interpreted in such a way as to limit the use of legitimate instructional techniques, such as irony, argument, conjecture and refutation, or the assignment of readings which may present a controversial point of view. This Code also recognizes the right to teach according to one's best judgement, within the bounds of the course calendar description and requirements of competency.

Management Rights

12. This Code is not to be applied in such a way as to detract from the right and duty of those with supervisory authority to manage, and if necessary to discipline, faculty, administrative and support staff, and students in accordance with collective agreements and University policies and procedures.

Union Rights

13. This Code is not to be applied in such a way as to detract from the rights of unions to defend the interests of their members and to exercise their rights under a collective agreement.

Recourse at Law

14. This Code does not detract from the right of members to seek recourse at law.

Definitions

Discrimination

- 15. Discrimination is defined as treatment which:
 - has the effect or purpose of imposing burdens, obligations or disadvantages on members or groups of members; and
 - b) for which there is no bona fide and reasonable justification; and
 - c) when such treatment is based on one of the prohibited grounds specified in the Québec Charter of Human Rights and Freedoms, that is: race, colour, ethnic or national origin, sex, pregnancy, sexual orientation, civil status, age, religion, political convictions, language, social condition, handicap or the use of a means to palliate a handicap.

Harassment

- 16. Harassment is defined as:
 - a) unwelcome, vexatious conduct, directed towards a member or group of members; and
 - b) which may or may not be based upon one of the prohibited grounds specified in article 15 c); and
 - when such conduct has the effect or purpose of unreasonably interfering with a member's work or academic, athletic or artistic performance or of creating an intimidating or hostile environment for work or study.

Sexual Harassment

17. Sexual harassment is defined as conduct of a sexual nature such as, but not limited to, sexual assault, verbal abuse or threats of a sexual nature, unwelcome sexual invitations or requests, demands for sexual favours or unwelcome and repeated innuendos or taunting about a member's body or appearance when:

- submission to such conduct is made, whether explicitly or implicitly, a term or condition of a member's employment or educational progress; or
- submission to or rejection of such conduct is used as the basis for an employment or academic decision affecting that member; or
- when such conduct has the effect or purpose of unreasonably interfering with a member's work or academic, athletic or artistic performance or of creating an intimidating or hostile environment for work or study.

Threatening or Violent Conduct

- 18. Threatening or violent conduct is defined as:
 - assaulting another member: or
 - threatening another member or group of members with bodily harm or causing another member or group of members to have reasonable grounds to fear bodily harm; or
 - creating, or threatening to create, a condition which unnecessarily endangers or threatens the health, safety or well-being of another member or group of members or threatens the damage or destruction of property.

Offenses Against Property

- 19. Offenses against property are defined as wilfully or recklessly taking, having unauthorized possession of, damaging or destroying any property belonging:
 - to the University; or
 - to any member when such property is on University premises or on other premises during the course of a University-sponsored activity or event.

Informal Resolution of Complaints

Consultation With the Advisor on Rights and Responsibilities

- 20. The Advisor on Rights and Responsibilities shall be impartial in the exercise of his/her functions, and shall respect the confidentiality of all parties to any matter in which the Advisor has been requested to assist.
- 21. Members of the University who believe that they have been subjected to conduct that violates this Code may consult the Advisor. The primary goal is to assist the complainant to make an informed choice as to the most appropriate method of resolution to a complaint or conflict.
- 22. Normally, a complaint should be made within two months of the alleged violation. This period may be extended at the discretion of the Advisor. If the person against whom the complaint is made (the respondent) is a member of a union, the Advisor shall inform the complainant of any delays regarding disciplinary procedures which may be prescribed in the respondent's collective agreement.
- 23. The Advisor will make a determination whether the complaint:
 - a) is not within the jurisdiction of this Code, in which case the Advisor shall, if appropriate, re-direct the complainant to the relevant channels for redress; or
 - is trivial, frivolous, vexatious or made in bad faith; or
 - is being heard, or has already been heard by another University officer, or through another University procedure; or
 - does not appear to be supported by sufficient evidence.
- 24. The Advisor may refuse to assist in informal resolution, or, in the case of complaints made against students, to proceed with a formal complaint, on one or more of the grounds listed in article 23.
- 25. Given the Advisor's agreement to proceed, the complainant shall decide upon one of the following courses of action:
 - a) to proceed with informal conflict resolution; or
 - b) to proceed with a formal process; or
 - to take no further action; or c)
 - to pursue any other course of action available at law, under a collective agreement or under any other University policies or procedures.

Procedures for Informal Resolution

26. Should the complainant opt to proceed with informal conflict resolution, he or she shall authorize the Advisor to take steps to attempt an informal resolution of the complaint. Such steps may take a variety of forms, for example, helping to clarify perceptions, raising awareness of the impact of certain conduct, reconciling differences or sorting out misunderstandings. The parties may be brought together or communication may be effected through the Advisor.

- 27. Some situations lend themselves to structured mediation. If both parties agree to try this method, the Advisor may personally act as mediator, or may assist the parties in obtaining the services of another member of the University who is qualified to perform this function.
- Any informal agreement reached between the parties is entirely voluntary. Neither the Advisor nor any other mediator has authority to impose conditions or sanctions upon either party.
- 29. The complainant may withdraw the complaint at any point during the process of informal resolution. As well, the Advisor may withdraw from the informal process if he or she determines that no useful purpose will be achieved by continuing to attempt informal resolution.
- 30. Normally, attempts at informal resolution shall not last longer than three months.

Files of Complaints Resolved Informally

31. Upon completion of the informal process, the Advisor shall prepare a summary of the matter, but shall remove all information identifying the parties from the file.

Procedures for Adjudicating Formal Complaints Made Against Students 32. Formal complaints against students shall be adjudicated by a Hearing Panel selected from the Student Hearing Board pool.

Structure of the Student Hearing Board

- 33. A permanent Secretary of the Student Hearing Board (the Secretary) shall be appointed by the Rector. The Secretary shall be responsible for the administrative functioning of the Student Hearing Board and shall maintain the confidential files and recordings of proceedings of the Student Hearing Board.
- 34. A permanent Selection Committee shall be struck by the Secretary. It shall be composed of the Secretary, the Dean of Students and a representative from each of the recognized student associations. The Selection Committee shall recruit, screen and appoint student members to the pool of the Student Hearing Board. The Selection Committee shall also appoint the Chair and Alternate Chair(s) of the Student Hearing Board.
- 35. Normally, appointments shall be made for a two-year term which is renewable. The terms shall run from June 1 to May 31. Every effort shall be made to stagger the appointments so as to ensure continuity.
- 36. The role of the Chair and Alternate Chair(s), outlined below, requires impartiality and particular skills which take time to develop and cannot easily be acquired by lay persons during a brief term of office. As such, the Chair and Alternate Chair(s) shall normally be selected from qualified alumni or emeriti who have training in law or tribunal procedures as well as some knowledge of the University environment.
- 37. A minimum pool of six (6) students composed of both undergraduate and graduate students shall be maintained, any three of whom shall sit on a given Hearing Panel as selected by the Secretary.
- 38. The members of the Student Hearing Board shall receive annual training, prepared and conducted jointly by the Advisor, the Director of Advocacy and Support Services and the University Legal Counsel. Student panellists shall receive training before being selected to serve on any panel.

Initiating a Formal Complaint Against a Student

- 39. A complainant may opt to proceed directly to a formal complaint at the outset (article 25) or after an attempt at informal conflict resolution has been unsuccessful. If the Advisor has refused to proceed with a formal complaint on the grounds listed in article 23, the complainant may appeal such a refusal by submitting a request in writing. The Advisor shall forward the request, together with a written explanation of the refusal, to the Secretary of the Student Hearing Board, who shall convene a Hearing Panel to decide the issue. The decision of a Hearing Panel is final.
- 40. In the event that a formal complaint proceeds, the following articles shall apply:
- 41. The Advisor shall inform the complainant of the following:
 - a) the required format for submitting the complaint, which must be made in writing, signed and dated, and must identify the respondent and the precise nature of the complaint;

- the procedures which shall be followed by a Hearing Panel;
- the right of the complainant and the respondent to consult any person in the preparation of his or her case, and to be accompanied or represented before a Hearing Panel by any member of the University community. If the complainant is a student, he or she also has the option of obtaining an advisor through the services of Advocacy and Support Services;
- the right of appeal.
- 42. Upon receipt of the written complaint, the Advisor shall immediately notify the respondent. The respondent shall receive a copy of the complaint together with the information detailed in article 41 b), c) and d). Any written notice addressed to a student under this Code shall be sent by courier to the last address provided by the student to the University and shall be deemed to be received one (1) day after sending.
- 43. Concurrent with the notification sent to the respondent, the Advisor shall notify the Secretary who shall convene a Hearing Panel to hear the matter. Thereafter, the Secretary shall be responsible for all communications with the complainant and the respondent.
- 44. A Hearing Panel shall be convened as soon as possible after receipt of the notification by the Secretary and normally within twenty-five (25) working days.
- 45. Once a hearing date is fixed by the Secretary, the complainant shall submit any additional documentation substantiating his/her case to the Secretary no later than fifteen (15) working days before the scheduled hearing date. Such documentation shall include any supporting documents and a list of the witnesses, if any, that will appear. The Secretary shall forward the documentation together with a list of the panellists selected for the case to the respondent no later than ten (10) working days before the scheduled hearing date. The list of panellists shall also be sent to the complainant.
- 46. Either party may object to the participation of a panellist on the grounds of potential bias. A reasoned objection shall be filed with the Secretary who shall arrange for an alternate panellist to serve if he or she determines that the objection is well founded. If the Secretary feels that the objection is frivolous and the matter cannot be resolved, the issue shall be forwarded to the Chair of the Student Hearing Board who shall render a final decision in this regard.
- 47. A settlement may be agreed to by the parties at any time prior to the hearing. The Advisor shall be informed of the general substance of the settlement.

The Hearing

- 48. The Student Hearing Board shall establish its own rules of procedure. Minimally, these rules shall provide for opening statements by the parties, the presentation of evidence and witnesses, the right of cross-examination, questioning by members of the Hearing Panel, representations with respect to desired sanctions and closing statements. Hearings shall be recorded, and the cassette kept as part of the permanent record of proceedings.
- 49. The role of the Chair shall be to preside over the proceedings, keep order and ensure fairness. The Chair shall, as well, preside over the deliberations of the Hearing Panel but shall not vote.
- 50. The hearing shall be closed and confidential unless both parties have consented in writing to the attendance of members of the University community.
- 51. The Hearing Panel shall provide a signed, dated and reasoned decision. The standard of proof to be relied upon by the Hearing Panel shall be one of a "balance of probabilities".

- 52. The Hearing Panel may impose one or more of the following sanctions:
 - a) a written reprimand:
 - imposed conditions. The Hearing Panel does not, however, have the authority to suspend a student from any academic activity:
 - payment as compensation for damage or loss of property or otherwise rectify a situation which the student created or helped to create;
 - a fine not exceeding \$500;
 - specified volunteer community service at Concordia University of up to ten (10) hours per week for a specified period of time;
 - subject to confirmation by the Rector or designate, suspension or expulsion. The execution of any sanctions shall be suspended until the expiry of the delay to file an appeal (see article 56) or until the rendering of the decision by the Appeals Committee if an appeal is heard. All monetary sanctions shall be payable within ten (10) working days of the delays set out in this paragraph.

- 53. The decision of the Hearing Panel shall normally be rendered within ten (10) working days of the hearing and shall be communicated in writing to both parties and the Advisor.
- 54. The administration and monitoring of the sanction(s) imposed shall be the responsibility of the Dean of Students. Failure to pay any monetary sanction imposed within the delay prescribed in article 52 shall result in the amount being added to the respondent's student account. Should the respondent fail to comply with any non-monetary sanction, the Dean of Students may recommend to the Rector that the student not be permitted to re-register, be suspended, or that his or her diploma be withheld until such time as the respondent has fully complied with the sanction(s) imposed.

Appeals

- 55. A party who wishes to appeal a decision or sanction of the Hearing Panel, or both, shall apply in writing to the Appeals Committee of the Board of Governors for the authorization to lodge an appeal. An Appeals Panel, composed of three (3) members of the Appeals Committee selected by the Chair of the Appeals Committee, shall decide whether an appeal shall be heard, having regard to the circumstances of each case.
- 56. Such request for authorization to appeal shall be submitted to the Secretary of the Appeals Committee no later than fifteen (15) working days after the date of transmission to the parties of the decision of the Hearing Panel.
- 57. Such request may be based only on the grounds of discovery of new evidence following the rendering of the decision of the Hearing Panel or on the presence of serious and prejudicial procedural defects. The request shall state in clear and precise terms the grounds on which the appeal is based.
- 58. If the authorization to appeal is granted, the appeal shall be heard either by the same Appeals Panel which authorized the appeal, or a new Appeals Panel as determined by the Chair of the Appeals Committee, and notification of such shall be sent to both parties.
- 59. The Appeals Panel has the authority to confirm, reverse or modify the decision being appealed. Further, should the appeal be based on the production of new evidence, the Appeals Panel may order a new hearing of the complaint by a new Hearing Panel.
- 60. The decision of the Appeals Panel shall be signed, dated and reasoned, and shall be sent to both parties, the Student Hearing Board Secretary, the Advisor and the members of the Hearing Panel who presided at the hearing of the complaint.
- 61. The decision of the Appeals Panel shall be final.

Files of Formal Complaints Against Students

62. The Advisor shall maintain a file of all formal complaints processed. The file shall include the written complaint, the decision of the Hearing Panel and the decision of the Appeals Committee, if any. If a settlement is reached prior to a hearing, the general substance of the settlement shall be included in the file. If the complaint is withdrawn at any stage of the formal process, a notation to that effect shall be recorded, but all information identifying the parties shall be removed from the record.

Procedures for Adjudicating Formal Complaints Made Against a Faculty, Administrative or Support Staff Member

- 63. Formal complaints made against a faculty, administrative or support staff member shall be adjudicated according to the provisions of the respondent's collective agreement or the relevant University policy.
- 64. A complainant may opt to proceed directly to a formal complaint at the outset (article 25) or after an attempt at informal conflict resolution has been unsuccessful.

Initiating a Complaint Against a Faculty, Administrative or Support Staff Member

- 65. The Advisor shall provide the complainant with the following information:
 - the required format for submitting the complaint, which must be made in writing, signed and dated, and must identify the respondent and the precise nature of the complaint;
 - the identity of the authority to whom the complaint shall be submitted under the terms of the respondent's collective agreement or the relevant University policy;
 - the right of the complainant to consult any person in the preparation of his or her case, and to be accompanied or represented by any member of the University during the process of resolution. If the complainant is a student, he or she may opt to be

accompanied by an advisor obtained through the services of Advocacy and Support Services. If the complainant is a member of a union, he or she may opt to be accompanied by a union representative.

66. The complainant shall submit the written complaint to the authority identified in article 65 b). The authority shall take the necessary steps to resolve the matter in such a manner as to respect the principles of natural justice and the procedures of any collective agreement or University policy which may apply. Hereinafter, the authority is responsible for all communication with the complainant and the respondent.

Communication of the Decisions Taken

- 67. When the matter has been decided, the authority shall notify both the complainant and the Advisor of the general substance of the decision or action that was taken as a result of the complaint.
- 68. If the decision or action taken by the authority does not constitute a disciplinary action as defined by the relevant collective agreement or University policy, the authority shall monitor compliance by the respondent. Once satisfied that compliance has been effected, the authority shall so inform the complainant.
- If disciplinary action is taken and is subsequently overturned by a higher authority or by grievance and arbitration procedures, the complainant and Advisor shall be notified.

Files of Formal Complaints Against Faculty, Administrative and Support Staff Members

70. The Advisor shall maintain a file of formal complaints received against faculty, administrative or support staff members, which shall summarize the substance of the consultation with the complainant, the record of resolution as supplied by the authority and information that a sanction has been overturned through grievance or arbitration, if this is the case.

Urgent Measures

- 71. The University's response to any urgent situation involving threatening or violent conduct shall be coordinated by the Advisor. He or she shall take the necessary steps to convene an Ad hoc case management team (the Team) and shall thereafter coordinate the activities of the team until the situation has been resolved.
- 72. The Advisor's role shall be limited to that of coordination and facilitation, where necessary advising and supporting all those affected by the incident, and acting as the central link for intra-University communications relating to the incident.
- 73. The Advisor and the Team shall be guided by the *Protocol for the co-ordination of urgent cases* of threatening or violent conduct (the Protocol).
- 74. The Advisor shall be responsible for ensuring that the Protocol is revised and updated as needed, and to this end, shall consult whatever experts are appropriate. Revisions of the Protocol shall be submitted to, and approved by, the Rector.

Reporting and Responding to Urgent Situations

- 75. Members who are faced with an urgent situation involving threatening or violent conduct, where there is reasonable cause to believe that the safety of persons may be threatened, shall immediately contact the Security Department. The Security Department shall take whatever action is necessary to secure the safety of persons, and shall alert the Advisor to convene a Team as necessary.
- 76. Members shall report to the Advisor any conduct which they have reasonable cause to believe potentially threatens the safety of persons. The Advisor shall assess the situation as specified in the Protocol, consulting experts as necessary, and make recommendations as to any further action appropriate in the circumstances.
- 77. Any member of the University who is called to a team meeting shall respond promptly.

Temporary Suspension

78. Where a member of the faculty or administrative and support staff presents a clear and present danger to the safety of persons or to the activities of the University as a whole or of any of its individual members, the matter shall be dealt with according to the provisions of the relevant collective agreement or University policies.

- 79. A member against whom such action is taken may seek recourse through the grievance procedures of the relevant collective agreement or the grievance procedures contained in University policies.
- 80. Where a student member presents a clear and present danger to the safety of persons or to the activities of the University as a whole or of any of its individual members, the Rector or his or her delegate may suspend the student on a temporary basis, exclude the student from any University premises and take any other steps that may be appropriate. The suspending officer shall notify the Registrar, the relevant Dean and the Security Department of the terms of the suspension.
- 81. In such a case, the suspending officer shall immediately lay a complaint against the student under articles 40 to 54 of this Code. The regular delays of this Code shall not apply, and a preliminary hearing shall be convened by the Secretary of the Student Hearing Board within five (5) working days of the suspension order. The purpose of the hearing shall be solely to determine whether or not sufficient reason exists for the suspension. The Hearing Panel shall render its decision and inform the parties immediately following the preliminary hearing.
- 82. Should the suspended student be unable to attend the hearing within the prescribed delay, he or she shall notify the Secretary as soon as he or she is able to attend a hearing. Upon such notification, the Secretary shall convene a hearing as soon as possible.
- 83. In the event that the temporary suspension is upheld by the Hearing Panel, a further hearing into the complaint shall be held within ten (10) working days of the preliminary hearing. The Hearing Panel shall render its decision and inform the parties within three (3) working days of the hearing. The suspension shall continue until the decision has been rendered.
- 84. In the event that the suspension is not upheld by the Hearing Panel at the preliminary hearing, the hearing into the complaint shall proceed according to the normal delays specified in this Code.
- 85. In the event that the temporary suspension is not upheld, or the Hearing Panel determines that the complaint is unfounded, that decision shall not invalidate the suspending officer's prior action. However, every effort shall be made to remedy any academic disadvantage that the student may have experienced as a consequence of the temporary suspension.
- 86. Upon the lifting of the suspension, the Secretary shall notify the Registrar, the relevant Dean and the Security Department.

Retention of Files

87. All complaint files maintained by the Advisor shall be confidential and accessible only to the staff of the Office of Rights and Responsibilities. Such files shall be destroyed according to a retention schedule determined in accordance with provincial legislation.

Appointment and Functions of Advisor

- 88. The Advisor on Rights and Responsibilities shall be appointed by the Rector upon the recommendation of an advisory committee struck for this purpose. The Advisor shall report to the Rector.
- 89. The appointment shall be made for an initial term of two years, renewable for further terms of five years. During the fourth year of each such term the Rector shall appoint an appraisal committee which shall review the operations of the Office of Rights and Responsibilities and make recommendations to the Rector. This review shall include, but not be limited to, consultations with the internal community as well as external appraisal.
- The Advisor shall direct the operations of the Office of Rights and Responsibilities, and carry out all duties described in this Code.
- 91. The Advisor shall submit an annual report to the Rector by September 30 of each year. The report shall detail the activities of the Office of Rights and Responsibilities, including statistics on all complaints received, and make recommendations, as necessary, with regard to either the Code of Rights and Responsibilities or the operations of the Office. The annual report shall be published in the University's newspaper.

Complaints Relating to Operations of the Office of Rights and Responsibilities

92. If a member considers that the Advisor has failed to follow the procedures outlined in this Code, with respect to any matter to which the member has been a party, he or she may submit a written complaint, detailing the alleged procedural failure, to the Rector. The Rector shall investigate the complaint and inform the member of the results of the investigation.

The Advisory Committee on Rights and Responsibilities

- The Rector shall appoint an Advisory Committee on Rights and Responsibilities (the Committee) composed of the following members:
 - one (1) student member, nominated by the undergraduate student association;
 - one (1) student member, nominated by the graduate student association;
 - one (1) administrative and support staff member nominated by the electoral college;
 - one (1) full-time faculty member nominated by the full-time faculty association;
 - one (1) part-time faculty member nominated by the part-time faculty association;
 - the Advisor, ex-officio;
 - a delegate of the Rector as Chair.
- 94. Appointments shall be for two years, renewable for one further term.
- 95. The mandate of the Committee shall be to:
 - a) assist in the development and implementation of activities to disseminate information about this Code, as envisaged in article 9;
 - make recommendations to the Rector on the continued development of the Code of Rights and Responsibilities, as necessary;
 - receive the annual report and make any representations to the Rector with regard to its content, as necessary.
- 96. The Committee shall meet at the call of the Chair, or at the call of any three (3) members of the committee, but no less than twice per academic year.
- 97. The Advisor shall respect the confidentiality of all nominative information relating to cases or complaints during discussions with the Committee.

17.20

OMBUDS OFFICE

Ombudsperson T.B.A.

Location

Sir George Williams Campus Ombuds Office Annex PR, Room: 100 (514) 848-4964

TERMS OF REFERENCE OF THE OMBUDS OFFICE

Scope

Scope

1. The Ombuds Office shall be independent of all existing administrative structures of the University. The Ombudsperson may help to resolve problems informally and may inquire into any University-related concerns or complaints. As well, he or she may inquire into the application of any policy, rule or procedure of the University. However, he or she may not inquire into the application or interpretation of a collective agreement, nor into the alleged violation of the duty of fair representation against a certified union. The Ombudsperson may make any recommendations he or she deems appropriate with regard to resolving problems or improving policies, rules or procedures. However, he or she shall have no actual authority to impose remedies or sanctions, or to enforce any policy, rule or procedure.

Functions

Functions of the Ombuds Office

- 2. Specifically, the Ombudsperson shall:
 - a) inform University members about existing policies, rules and procedures, and advise them
 as to the appropriate channel of redress for any concern or complaint they may have;
 - b) assist University members to resolve complaints informally and quickly;
 - at his or her discretion, conduct an independent and objective inquiry into complaints when normal channels of recourse have been exhausted;
 - d) explain decisions taken by University decision-makers when complaints are not substantiated;
 - e) at his or her discretion, recommend solutions when complaints are found to be valid;
 - f) bring to the attention of those in authority any policies, rules or procedures which appear unclear or inequitable or which might jeopardize the rights or freedoms of any members of the University. The Ombudsperson may suggest changes to the existing policies, rules or procedures or offer advice on the development of new policies, rules or procedures.

Special Concerns of the Ombuds Office

- In dealing with inquiries, the Ombudsperson shall be concerned that all members of the University are dealt with and deal with others fairly, and more specifically that:
 - a) decisions affecting members are made with reasonable promptness;
 - b) procedures used to reach decisions are adequate and the criteria and rules upon which such decisions are based are appropriate;
 - procedures and criteria used in making decisions are clearly communicated to those affected.

Procedures

Procedures

- The Ombudsperson shall have immediate access to such University records, reports or documents as are required to fulfil his or her functions. Requests for such access shall receive priority from all members.
- If the Ombudsperson decides to inquire into a matter, he or she shall make every effort to consult the relevant parties and give such parties the opportunity to reply, should they so wish.
- Upon the conclusion of an inquiry, the Ombudsperson shall advise all parties to a complaint of his or her findings and any recommendations that he or she has formulated.

- 7. In addition, the Ombudsperson may bring his or her findings to the attention of those in authority and make whatever recommendations he or she deems appropriate and to whomever within the University he or she feels should receive them. Such recommendations may bear either on the actions or decision of an individual or a group, or on the policies, rules and procedures which gave rise to them. If, upon receipt of such findings or recommendations, a University authority proceeds to disciplinary action in order to resolve the matter, the procedure of any relevant University policy or collective agreement shall be followed.
- The Ombudsperson may refuse to take up any case where he or she judges his or her intervention would be inappropriate and may withdraw from a case if continued involvement is ill-advised.
- If the Ombudsperson refuses to take up a case or withdraws from a case, he or she shall, on request, provide the applicant with a written statement of the reason.
- The Ombudsperson shall avoid involvement in cases where there may be conflict of interest.

Confidentiality

- 11. Should the pursuit of any inquiry necessitate the disclosure of details that identify an applicant, the applicant shall be informed. Any disclosure shall be limited to those who have a need to know.
- Should an applicant decide to withdraw an application in order to protect his or her anonymity, the Ombudsperson shall respect this decision.
- The Ombudsperson shall respect the confidentiality of any confidential information or materials to which he or she has access.
- 14. Should the Ombudsperson consider that the response to his or her recommendation has been unsatisfactory, he or she shall be entitled to make the recommendation public, provided always that, subject to Article 11, the confidentiality of the applicant is respected.

Files

15. The Ombudsperson shall maintain suitable records of complaints, findings and recommendations which shall be accessible only to the staff of the Ombuds Office. Such files shall be destroyed according to a retention schedule determined in accordance with provincial legislation.

Appointment of Ombudsperson

- 16. The Ombudsperson shall be appointed by the Rector upon the recommendation of an advisory committee struck for this purpose. The Ombudsperson shall report to the Rector.
- 17. The appointment shall be made for an initial term of two years, renewable for further terms of five years. During the fourth year of each such term, the Rector shall appoint an appraisal committee which shall review the operations of the Ombuds Office. This review shall include, but not be limited to, consultations within the internal community as well as external appraisal.
- 18. The Ombudsperson shall submit an annual report to the Rector by September 30 of each year. The report shall detail activities of the Ombuds Office, including statistics on complaints received, and shall make recommendations, as necessary. The Rector shall ensure that the appropriate administrators consider and respond to the recommendations contained in the report.
- 19. The annual report shall be published in the University's newspaper.

Complaints Relating to the Operations of the Ombuds Office

20. If a member considers that an Ombudsperson has committed a procedural or substantive violation of these terms of reference, with respect to any matter to which the member has been a party, he or she may submit a written complaint, detailing the alleged violation, to the Rector. The Rector shall investigate the complaint and inform the member of the results of the investigation.

STUDENT LIFE AND STUDENT SERVICES

18.1

18.1	STUDEN 18.1.1 18.1.2		
18.2	DEAN C 18.2.1	F STUDENTS Social and Cultural Activities	
18.3	ADVOC. 18.3.1 18.3.2 18.3.3 18.3.4 18.3.5 18.3.6 18.3.7 18.3.8	Campus Ministry Services for Disabled Students International Students Centre for Native Education Student Advagate Programme	
18.4	COUNS 18.4.1 18.4.2 18.4.3 18.4.4 18.4.5	Counselling Service Student Learning Services	
18.5	18.5.1 18.5.2	SERVICES Services Offered Health Insurance Health Promotion/Health Education Loyola Health Services	
18.6	RECREATION AND ATHLETICS		
18.7	FINANC 18.7.1 18.7.2 18.7.3 18.7.4 18.7.5 18.7.6	Federal and Provincial Loans and Bursaries Concordia University Financial Aid	
18.8	18.8.1	ECONOMIC SERVICES New Student Programme Residences and Off-Campus Housing	

STUDENT LIFE AND STUDENT SERVICES

Dean of Students DONALD L. BOISVERT

Director of Socio-Economic Services and Assistant Dean of Students ROGER CÔTÉ

Director of Advocacy and Support Services ANN KERBY

Director of Counselling and Development SUP MEI GRAUB

Director of Health Services MELANIE DREW

Director of Recreation and Athletics HARRY J. ZARINS

18.1 STUDENT LIFE AND STUDENT SERVICES

18.1.1 Student Services Mission

Student Services at Concordia provides students with programmes and services to enhance their academic achievement and promote their personal development as responsible, confident, wellrounded individuals. The staff is dedicated to creating a positive learning environment which values diversity and minimizes anxiety.

Student Services recognizes that all development, both intellectual and personal, is affected by a number of circumstances: financial, cultural, physical, psychological. A wide range of activities and services helps students to cope with challenges in these and other areas. Student Services also acts as an advocate for students. The overall aim of all programmes is to ensure that students can make the most of their university experience.

18.1.2 Concordia Council on Student Life (CCSL)

The Council, a body responsible for Student Services programmes, policies and budgets, studies the range of student life on both campuses. It is composed of nine students, two faculty members, and eight members of the Student Services staff. The Dean of Students chairs the Council. Its meetings are open to all members of the University community.

DEAN OF STUDENTS 18.2

Loyola Campus Administration Building, Room: AD 121 (514) 848-3535

Sir George Williams Campus Hall Building, Room: H 653 (514) 848-3517

The Dean of Students oversees Student Services including Advocacy and Support Services, Counselling and Development, Socio-Economic Services, and Health Services. The Dean of Students Office is the principal resource at the University for the interpretation and regulation of policies and procedures as these apply to the non-academic aspects of student life. Student associations and groups, of whatever nature, are one of the primary means by which students can relate meaningfully to the institution. By providing liaison with and support to student groups and their governing bodies, the Dean of Students encourages students in the conduct of their own collective affairs, and facilitates the growth of student associations and the active involvement in them by students.

http://deanofstudents.concordia.ca

18.2.1 Social and Cultural Activities

Social and Cultural Activities

A wide variety of social and cultural events is presented regularly by various student organizations and departments. The Concordia orchestra and choir are open to students, and they perform several concerts annually. There is a students' cafeteria and pub on each campus, as well as lounge facilities and games rooms.

ADVOCACY AND SUPPORT SERVICES 18.3

Advocacy and Support Services supports the self-development of students in exercising their own rights, works towards an environment which is open to constructive criticism, advocates against

discrimination, and encourages responsible change. The following units listed under Section 18.3 form the Advocacy Sector.

Loyola Campus Administration Building, Room: AD 130 (514) 848-3509

http://advocacy.concordia.ca

18.3.1 Legal Information Services Advice and help are offered to students requiring assistance on matters relating to their legal rights. Commissioners of Oaths are also available.

Loyola Campus Administration Building, Room: AD 130 (514) 848-4960

http://advocacy.concordia.ca/Legal

18.3.2 Child Care

Child care services are offered for children of students, faculty, and staff.

On the Sir George Williams Campus, parents may enrol children 18 months to five years of age in the *Centre de Petit Enfance Concordia*. Application forms and details may be obtained at the Information Desk in the Hall Building or at the daycare.

La Garderie Les P'tits Profs is located on the Loyola Campus. Parents may enrol children three months to five years. For more information about this child care service please contact the centre directly.

Financial assistance for child care expenses is available for eligible students through the Québec Financial Aid — Loans and Bursaries programme and through the *ministère de la Famille et de l'enfance*

Loyola Campus
La Garderie Les P'tits Profs
Annex BB
(514) 848-7788
http://alcor.concordia.ca/~qlpp/

Sir George Williams Campus Centre de Petit Enfance Concordia Annex DC (514) 848-8789 http://advocacy.concordia.ca

18.3.3 Campus Ministry

Campus Ministry offers a wide range of programmes and services for the University community. Chaplains work with students, staff, and faculty, integrating concerns and interests into discussions, studies, and prayer. It is a multi-faith ministry, with a network of resources from several religious traditions. Chaplains are available for personal appointments. Offices on both campuses are the venue for most Campus Ministry programmes and events, and are also a place for students to drop in to read or find a quiet space. The Loyola Chapel is also available for private reflection, as well as being a place for public worship on Sundays and weekdays.

Loyola Campus Sir George Williams Campus
Annex WF Annex Z
(514) 848-3588 (514) 848-3591

http://advocacy.concordia.ca/Ministry

18.3.4 Services for Disabled Students Students with visual or hearing impairments, mobility limitations, or learning disabilities may require special services while studying at Concordia. Services include orientation, tutors, notetakers, and classroom relocation. Tape recorders, FM personal systems, and personal computers with voice and Braille output are available for on-campus use. All students with disabilities are advised to contact the coordinator as early as possible for assistance in meeting their special needs. Students using interpreter services, attendant care, or requiring identification to their professors must contact the Services for Disabled Students prior to the beginning of classes.

Students requiring special accommodation for examinations must contact the Services for Disabled Students at the beginning of each semester. All arrangements are contingent upon submission of appropriate documentation. It is the responsibility of the student to submit recent documentation, request exam accommodations, and verify specific exam arrangements with the Services for Disabled Students. All accommodations must be exam specific as well as disability specific.

Learning Disability

Students who have recent documents attesting to a learning disability or who believe they may have a learning disability are advised to contact the Services for Disabled Students immediately upon admission to the University. While not every learning disability can be effectively accommodated within a university setting, learning strategies and, where appropriate, special assistance to support

students in their academic programme will be offered. Individualized examination arrangements can be provided to students with relevant assessments. These arrangements must be made with the Services for Disabled Students Office well in advance of the scheduled examination.

Lovola Campus Administration Building, Room: AD 130 (514) 848-3536/Voice & TDD

Sir George Williams Campus Hall Building, Room: H 580 (514) 848-3525/Voice & TDD

http://advocacy.concordia.ca/Disabled

18.3.5 International Students

The International Students Office is responsible for providing special programmes and services to promote and support the growth and development of International students. For additional information, see §19.

> Sir George Williams Campus Hall Building, Room: H 653 (514) 848-3515

http://advocacy.concordia.ca/International

18.3.6 Centre for Native Education

The Centre for Native Education offers support services and resources to Native students at Concordia. Run by Native people, the Centre is a welcoming space where Native students can meet to plan social activities or just relax between classes. Staff and faculty are available to address individual needs and provide support and encouragement for all Native students at Concordia to continue with their programme and achieve their highest potential. The Centre also seeks to increase awareness of Native issues and increase the knowledge of Native cultures among the Concordia community. Native students may access the Centre's academic programmes and services, including study rooms and computers, tutoring, and photocopy services.

> Sir George Williams Campus Annex V, Room: 311 (514) 848-7326

http://advocacy.concordia.ca/Native

18.3.7 Student Advocate Programme

Student advocates are currently registered at Concordia and trained in University rules and regulations. They are students from various disciplines and backgrounds, dedicated to helping their peers. Student advocates can act as representatives in both academic and non-academic cases. They can accompany students to hearings and appearances before committees. Student advocates can assist with student requests, grade re-evaluation applications and appeals, and can provide information and referral to University resources.

> Loyola Campus Administration Building, Room: AD 130 (514) 848-3509

http://advocacy.concordia.ca/Student_Advocate

18.3.8 Peer Support Programme

The Peer Support Programme is a student-staffed listening and referral centre for Concordia students. The service is free and confidential. Peers receive intensive and ongoing training so they can help students clarify problems and can make appropriate referrals. Peers also facilitate a number of outreach programmes and discussion groups.

> Sir George Williams Campus Annex Z, Room: 02 (514) 848-3859

http://advocacy.concordia.ca/Peer_Support

COUNSELLING AND DEVELOPMENT 18.4

Counselling and Development helps ensure student success, including smooth transition into and out of the University. Friendly, professional staff help students deal with personal, academic, and career concerns. As well, a wide variety of workshops for students are offered free of charge throughout the school year.

Services are available for students from all cultural backgrounds and sexual orientations. Services are offered in groups or individually, in English and French.

Loyola Campus 2490 West Broadway, WC 101 (514) 848-3555 Sir George Williams Campus Hall Building, Room: H 440 (514) 848-3545

Monday to Friday: 9 AM to 5 PM* *Summer hours vary.

Monday to Thursday: 9 AM to 8 PM*

Friday: 9 AM to 5 PM

http://cdev.concordia.ca/CnD/cndstart.html

18.4.1 Student Success Centre The Student Success Centre offers a wide range of programmes designed to ensure success at Concordia. A Student Welcome Room (H 481) offers personalized contact and information about university services important to student success.

- Smart Start Programme Smart Start, a welcoming programme for new students, is offered at the beginning of each semester to help students make the transition to university.
- Success Check-up The Student Success Inventory aids students in discovering what they
 need in order to excel.
- Student Success Workshops Students build skills for success through workshops such as "Mastering Academic Stress" and "Achieving Academic and Personal Goals".
- Learning Disabilities Screening Test Program.

18.4.2 Counselling Service Professional counsellors, accredited psychotherapists and psychologists offer Concordia students educational, career, and personal counselling; individually or in groups.

Personal Counselling and Short-term Psychotherapy help students who are experiencing difficulties to clarify personal issues and find effective ways of dealing with them. Confidentiality is ensured. Personal Development Workshops are offered during the Fall and Winter semesters and can help with building relationships; communicating; planning one's life and career; understanding oneself and others; coping with incest, loss, alcoholism, stress; dealing with gay, lesbian, and bisexual issues. Educational Counselling offers help to all Concordia students who want to plan their university education and choose courses suited to their interests and aptitudes.

Career Counselling can help students carry out job search and make career choices based on their interests, skills, and abilities.

The Career Computer Lab enables students to assess their interests and aptitudes using specially designed software.

Vocational Testing is available to help both graduate and undergraduate students to assess their academic and career interests as well as their personal preferences.

18.4.3 Student Learning Services Student Learning Services offers assistance to all Concordia students who want to improve their academic skills and learning potential.

Learning and Study Skills Specialists offer help to students on an individual basis to assess and develop their academic skills.

Peer Math Assistants offer help in small groups for students enrolled in basic Math courses. Peer Writing Assistants offer individual help with writing to students in all faculties and at all levels. Workshops are available to help students in such areas as study skills, academic reading and writing, time management, oral presentations, and exam anxiety.

18.4.4 Career Resource Centre The Career Resource Centre provides a wide spectrum of educational, career, and employment information in print and electronic format to help students orient their future. Compilations of top Internet sites on all these subjects are available.

The Education Collection, worldwide in scope, includes profiles and rankings of universities, university calendars, programme directories, and sources of financial aid.

Career Information includes career encyclopedias, and books and pamphlets on such topics as individual occupations, labour-market trends, and salaries.

Job Search Resources include information on researching occupations and potential employers. It also includes books on such topics as designing résumés, writing cover letters, preparing for job interviews, conducting an electronic job hunt, and job hunting techniques.

Test Applications and Study Books are available to help students prepare for and take tests such as MCAT, LSAT, GMAT, and TOEFL.

Personal Development Resources include a variety of self-help books on such topics as study skills, time management, assertiveness training, coping with stress, and dealing with personal relationships.

18.4.5 Career and Placement Service (CAPS)

CAPS helps students prepare for and gain entry into the labour market. It is an important link between university life and the "real world". CAPS offers both personalized and Internet services that can help students find jobs that match their qualifications.

Employment Assistance can help students identify their job skills and learn how to present themselves in response to labour-market demands. Individual appointments, as well as information sessions and group workshops, are offered in the areas of job search, résumé writing, and interview preparation. Student Placement Assistants (SPAs), a team of trained and supervised students, offer résumé check-up

Employment Opportunities are available on CAPS Web sites for students seeking summer, part-time, and full-time positions.

A job search Internet computer lab is available at CAPS offices.

An electronic résumé bank enables CAPS to quickly refer students to employers.

On-Campus Recruiting: During their last year of studies, students can apply for entry-level positions offered by large corporations that conduct annual recruiting campaigns in the fall and winter. Students can consult the list of campus recruiters available through links on the CAPS Web site.

> Sir George Williams Campus 2070 Mackay, EN 109 (514) 848-7345

Monday to Friday: 9 AM to 5 PM — Summer hours vary

http://cdev.concordia.ca/CnD/careerservices/CAPS/capsframe.html

18.5 **HEALTH SERVICES**

Health Services is an on-campus clinic and health promotion centre. The staff, which includes nurses, family physicians, psychiatrists, psychotherapists, a dermatologist, support staff, a health educator and peer health educators, work collaboratively to provide students with high-quality personalized health care and health education.

Medical Condition and Academic Responsibilities: If medical problems or concerns are interfering with a student's ability to attend class, complete assignments, or write exams, Health Services can work with the student to assess the problem and review ways in which it can be of assistance.

Confidentiality: All services are strictly confidential. Information is only released with the student's written authorization. This policy applies regardless of whether the information is requested by family members, community physicians, therapists or University officials.

18.5.1 Services Offered Many services are offered through Health Services. For those which are not offered (i.e. dental and eye care), Health Services can provide references to outside resources that often give discounts to Concordia students.

The services offered include:

- medical evaluation, treatment, and consultation;
- general medical care for injuries and illnesses such as cuts, minor suturing, sprains and strains, colds, flu, exacerbation of asthma;
- preventive medical care, including immunizations and annual physicals;
- gynecology, birth control, morning after pill, pregnancy tests, and pregnancy continuation or abortion referrals;
- Sexually Transmitted Disease (STD) assessments, cultures, treatment, and safer sex education;
- · HIV non-nominal testing which includes pre- and post-test counselling;
- allergy injections (after allergy evaluation has been assessed and treatment prescribed by
- dermatology, including liquid nitrogen treatments for wart removal;
- nutrition and body image counselling and education;
- psychiatry and psychotherapy;
- · drug and alcohol consultation and referrals for substance abuse.

How to Use Health Services: Using Health Services is easy. Students may call ahead to make an appointment for predictable issues or concerns such as a physical examination, prescription renewal, or health education. For more urgent health-care needs, students may come into one of the walk-in clinics where patients are seen on a first-come, first-served basis. Calling ahead first for information on waiting time is a good idea in order for students to plan their time.

18.5.2 Health Insurance Most of the services offered at Health Services are free of charge provided students have a current Concordia I.D. card and valid health insurance. For visits with a nurse or the health educator, students will be asked to show their Concordia I.D. card.

For physician visits, proof of Québec Health Insurance plan coverage, coverage from their province, or International Student Insurance is required. If students do not have a valid health card, Health Services will provide them with a physician appointment, but will have to charge a service fee. Further information about coverage is available at Health Services at 2155 Guy Street, room ER 407. Health Services has an information pamphlet on how to obtain a valid health card which should be presented at all times.

Out-of-Province Students: To retain health coverage while studying at Concordia, out-of-province students must notify their provincial health authority of their status as a student in Québec. This must be done at the beginning of each academic year. Information on how to accomplish this can be obtained through Health Services.

18.5.3 Health Promotion/ Health Education

Health Services believes in health education, health promotion, and informed health care consumerism. It offers discount prices on a wide variety of items: condoms, dental dams, latex gloves, spermicidal foam, finger splints, first aid kits, band-aids, ace bandages slings and oral thermometers. Health Services maintains a lending library which is stocked with hundreds of books, relaxation tapes and videos. The health educator at Health Services, along with other Health Services staff and the peer health educators, bring health promotion information to students through the monthly newsletter Health Notes and regular health information kiosks in the Hall Building or at Loyola.

18.5.4 Loyola Health Services

The Information and Referral Centre at the Loyola Campus ensures access to health care and health information on the Loyola Campus. The Centre is staffed by a nurse who can provide many of the services offered at the SGW Health Services. Appointments for the SGW Health Services can also be made through the Loyola Health Services.

Loyola Campus Information and Referral Centre Administration Building, Room: AD 121-3 (514) 848-3575

(514) 848-2833 (fax)

Office Hours:

Monday to Friday: 9 AM to 4:30 PM* *Closed for lunch between 11:30 AM and 1 PM Sir George Williams Campus Annex ER, Room: 407 (514) 848-3565 (514) 848-2834 (fax)

Office Hours:

Monday to Friday: 9 AM to 5 PM Accommodations may be made for evening appointments.

http://health.concordia.ca

18.6 RECREATION AND ATHLETICS

Physical activity is an important component of student life and it provides many opportunities for individual growth and development. Recreation and Athletics offers a complete and diversified programme in order to provide an opportunity for all students to participate in a physical activity of their choice. The principles of fair play and equality of opportunity guide all programme activities. Fitness, recreational, and skill-development programmes for men and women operate on both campuses under the supervision of professionally trained instructors. These activities provide a forum for physical fitness, structured participation, and low-intensity competition. The interuniversity sport programme is primarily for students with playing experience and those who wish to pursue a high level of competition. Graduate as well as undergraduate students pursuing studies on a full-time basis, and meeting the requirements of the Canadian Interuniversity Athletic Union, are eligible to represent Concordia in interuniversity competition. Concordia University holds memberships in the CIAU, O-QIFC, QSSF, and the OUA. Although Concordia has fielded national championship teams, the focus of the interuniversity programme continues to be the development of academic and athletic excellence. Towards this end, Recreation and Athletics offers a comprehensive academic athlete support programme to all student-athletes involved in interuniversity teams.

The south campus is the focal point of all fitness, recreation, and sport activities on the Loyola Campus. This facility includes full-length playing fields and a fitness and recreation centre complete with an ice arena, gymnasium, and weight-training room. The Sir George Williams intramural and instructional programmes are centred in the Victoria School gymnasium.

Loyola Campus Athletics Complex, Room: PA 104 (514) 848-3850

Victoria School, Room: GY 060 (514) 848-3860

Concordia Stinger Hot Line: (514) 848-3888

Sir George Williams Campus

18.7 FINANCIAL AID AND AWARDS

General Information

The Financial Aid and Awards Office assists students and prospective students in seeking and securing financial assistance to enable them to pursue their scholastic objectives. Student financial assistance is available in various forms, such as government student loans and/or bursaries; University scholarships and bursary programmes; on-campus work opportunities through the University Work Study Programme; and corporate scholarship programmes.

18.7.1 Gouvernement du Québec Student Loans and Bursaries

Application forms for Québec Loans and Bursaries are available from the Financial Aid and Awards Office. Each student is responsible for completing his or her application form and forwarding it directly to the government. Once a student's aid is calculated, he or she will receive a Détail de Calcul sheet indicating the amount of aid he or she will be entitled to receive.

It is important to note that the Loans and Bursaries Programme is based on the principle that the student and in some cases, his or her parents, sponsor or spouse, must contribute toward the cost of the student's education according to their respective means.

Financial assistance is initially granted in the form of a loan which a student must pay back at the end of his or her studies. If a student is entitled to more than the maximum loan, he or she may receive additional assistance in the form of a bursary, which does not have to be paid back.

Students are eligible to be considered for government assistance if they meet the following conditions: 1) Canadian Citizen or Permanent Resident; 2) domiciled and residing in Québec for one year [the last 12 consecutive months before pursuing full-time studies (excluding residents of other provinces who move to Québec to pursue their full-time studies)]; 3) must be enrolled full-time. Full-time credit load for undergraduate students is defined as at least 12 credits per term. For Graduate students (master's and PhD), status is defined by the Admissions Office of the School of Graduate Studies. Graduate students in a Certificate or Diploma programme must be registered for a minimum of eight credits per term.

In addition, the student must not have received assistance for a period exceeding:

- a) Nine terms of university studies towards a single bachelor's degree;
- 11 terms of university studies towards a single bachelor's degree which required more than 90 credits (not applicable to Mature students);
- 13 terms of university studies towards a single bachelor's degree in a co-op programme;
- d) Seven terms of university studies towards a master's level degree;
- e) Eight terms of university studies towards a master's level degree with thesis;
- f) 11 terms of university studies towards a doctorate degree.

The periods described above (a,b,c, and d) are not cumulative, but are independent of each other. A student may not receive assistance for more than 22 semesters of full-time study.

The Department of Aide financière aux études set the following maximum cumulative debt load starting 1997-98 academic year. Please be advised that the maximum cumulative debt load is unrelated to your eligibility periods, in other words, you might not be eligible for any assistance if you have accumulated a maximum debt load even if you have not used up all your eligibility periods.

Level of study Maxim	num limit of loans
Secondary vocational school	\$ 21,000
College: general	\$ 15,000
technical	\$ 21,000
non-subsidized	\$ 25,000
University: undergraduate programmes requiring less than eight terms (B.	A) \$ 25,000
undergraduate programmes requiring more than eight terms	
(co-op, engineering)	\$ 30,000
graduate: master's level	\$ 35,000
master's level with thesis	\$ 40,000
doctorate level	\$ 45.000

PHYSICALLY DISABLED STUDENTS

Students in any faculty, who are Canadian Citizens or Permanent Residents and who have been domiciled in Québec for one year prior to their full-time studies, may apply for a bursary if they suffer from a recognized major functional physical disability. Applications are available from the Financial Aid and Awards Office as well as at Services for Disabled Students. Further information is also available at Services for Disabled Students.

SUMMER LANGUAGE IMMERSION COURSE BURSARIES

Bursaries will be granted to students across Canada to enable them to enrol in a five-week immersion course in French or English at accredited institutions.

The aim of this programme is to provide post-secondary students with the opportunity to learn one of Canada's official languages as their second official language and to improve their knowledge of the culture represented by that language. Candidates whose mother tongue is neither French nor English may not receive bursaries to study English or French as their first official language. These bursaries will defray the cost of tuition, instructional materials, and room and board, but will not cover transportation costs or pocket money.

Inquiries regarding the awarding of bursaries (e.g., eligibility, etc.) should be made to the students' provincial coordinator or territorial official, the names and addresses of which are available at the Financial Aid and Awards Office.

Eligibility:

Students are eligible if they meet the following conditions:

- are Canadian Citizens or Permanent Residents at the time of application. Students studying in Canada on visas are not eligible;
- have general post-secondary standing or can prove that they will have obtained such a status by the time they become involved in the programme;
- were enrolled as full-time students during the previous academic year.

OFFICIAL LANGUAGE MONITOR PROGRAMME

Monitors are students who help students with the spoken language by conveying to them the real-life aspect of the language. They carry out their duties under the supervision of second-language teachers. Full-time monitors work for 10 months (September to June) for an average of 25 hours per week and may earn up to \$11,000. Part-time monitors are employed for eight months for an average of eight hours per week (September to April). The programme also provides reimbursement for certain expenses. For further information contact the Financial Aid and Awards Office.

18.7.2 Federal and Provincial Loans and Bursaries

Students applying for Federal and Provincial Loans (other than Québec) must be Canadian Citizens or Permanent Residents with one year's residency, without pursuing full-time studies, and domiciled in the province to which they apply.

When students apply for financial assistance from the government (Federal or Provincial), and certification of student status is required on the application form, this certification is obtained from the Financial Aid and Awards Office.

In all provinces except Québec, the provincial authority listed below administers the Canada Student Loan Plan (Federal) as well as their own programmes.

List of Appropriate Provincial Authorities

ALBERTA

Student Finance Board 6th Floor, Sterling Place 9940 - 106th Street Edmonton, Alberta T5J 1G7 (403) 427-2740

BRITISH COLUMBIA Student Services Branch Ministry of Advanced Education, Training and Technology 2nd Floor, 1106 Cook Street Victoria, British Columbia V8V 3Z9 1-800-742-1818 (toll free)

MANITOBA Student Aid Branch Box 6, 693 Taylor Avenue

Winnipeg, Manitoba R3M 3T9 (204) 945-6322

NEW BRUNSWICK

Department of Youth and Recreation

P.O. Box 6000

Fredericton, New Brunswick

E3B 5H1

1-800-667-8626 (toll free)

(506) 453-2577

NEWFOUNDLAND and LABRADOR

Student Aid Division Department of Education

P.O. Box 8700 St. John's, Newfoundland

A1B 4J6 (709) 729-4235

NORTHWEST TERRITORIES Department of Education, Student Services Section

Yellowknife, Northwest Territories

X1A 2L9 (403) 873-7194

NOVA SCOTIA Student Aid Office P.O. Box 2290, Station M Halifax, Nova Scotia

B3J 3C8

(902) 424-8420 (or 7737)

ONTARIO

Student Support Branch

Ministry of Colleges and Universities

P.O. Box 4500

189 Red River Road, 4th Floor

Thunder Bay, Ontario

P7B 6G9 (807) 343-7260

1-800-465-3013 (toll free in Ontario) 1-800-465-3958 (telephone device for the

hearing impaired)

PRINCE EDWARD ISLAND Canada Student Loans Committee Department of Education P.O. Box 2000 Charlottetown, Prince Edward Island C1A 7N8 (902) 892-3504

QUÉBEC

Ministère de l'Éducation Direction générale de l'aide financière aux étudiants 1035, rue de la Chevrotière Québec, Québec G1R 5A5 (418) 643-3750 (514) 864-4505 (for information or inquiry into the status of your file)

(Interactive telephone 24 hours/day, 7 days/week) SASKATCHEWAN

Saskatchewan Advanced Education and Manpower Student Financial Services 1855 Victoria Avenue Regina, Saskatchewan S4P 3V5 (306) 787-5620

YUKON The Student Financial Assistance Awards Committee Superintendent of Education P.O. Box 2703 Whitehorse, Yukon Territory Y1A 2C6 (403) 667-5141

CANADA STUDENT LOAN Department of the Secretary of State of Canada Student Assistance Directorate

P.O. Box 2090. Station D Ottawa, Ontario K1P 6C6 (819) 994-1844

18.7.3 Concordia University Financial Aid

Work Study Programme

Work Study is a Financial Aid programme funded by Concordia University. The programme is designed to assist full-time students with education and living costs, when their own resources are determined to be insufficient, by working part-time at Concordia University during the school year.

The intent of the programme is to give students an opportunity for career or life-related experience while, at the same time, meeting a portion of their financial need.

Students may work either or all of Summer, Fall, and Winter semesters for a maximum of 15 hours per calendar week. The hourly wage is set between \$7 and \$9.

Eligibility: A student is eligible for Work Study if he/she meets the following criteria:

- a) must be a Canadian Citizen, a Permanent Resident, or an International student:
- b) must be registered as a full-time student for the academic period in which the work is performed;
- must demonstrate financial need as evidenced by a needs test done by the Financial Aid and Awards Office.

Further information can be obtained at the Financial Aid and Awards Office, and by reading the Work Study Information and Application pamphlet available at the Financial Aid and Awards Office.

Tuition Deferrals

Students who have received a confirmation of financial assistance from a government funding source and who are unable to pay their tuition fees by the required deadlines may apply to defer payment until such time as they receive their funds. Requests for tuition deferrals must be made through the Financial Aid and Awards Office. Tuition deferrals will not cover any outstanding tuition fees from previous years nor the interest on the outstanding balance. For further information, please contact the Financial Aid and Awards Office.

Short-term Advances

Funds are available at the Financial Aid and Awards Office for students experiencing financial difficulties. Such advances are issued to undergraduate and graduate, full-time and part-time students at Concordia University. Students must see a Financial Aid and Awards officer for further information on eligibility requirements and conditions.

The service is made possible by contributions of the Concordia University Alumni Association Inc. to the University Emergency Loan Endowment Fund from which interest earnings support part of the Short-term Advance Programme.

18.7.4 Concordia University Scholarships and Bursaries

Concordia University Awards

Two types of awards are available to undergraduate students through the Financial Aid and Awards Offices; these are scholarships and bursaries.

Entrance Scholarships are available to students entering university programmes, and In-course Scholarships are available to students who have completed the previous year of full-time study at Concordia University. In all cases, scholarships are awarded on the basis of scholastic achievement and, for some awards, consideration is given to the involvement in university life.

Bursaries are available to students who have completed at least one semester of full-time study at Concordia University. These bursaries are known as In-course Bursaries, and are awarded on the basis of scholastic achievement and financial need.

Unless otherwise stated, all awards are granted to full-time students who are Canadian Citizens or Permanent Residents. Unless expressly authorized by the University Undergraduate Scholarships and Awards Committee, award recipients may hold only one of the following types of awards in a given academic year: Concordia Entrance Scholarships, Concordia In-course Scholarships, or Concordia In-course Bursaries.

For additional information and application forms, contact the Financial Aid and Awards Office or consult its *Financial Aid and Awards Office (FAAO) Handbook*.

CONCORDIA ENTRANCE SCHOLARSHIPS

A number of scholarships are available to students entering their first year of full-time study. These are awarded by the University Scholarship and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent. For a complete list, see §300.1 or consult the *FAAO Handbook*.

CONCORDIA IN-COURSE SCHOLARSHIPS

In-course Scholarships are awarded to full-time students (unless otherwise indicated) who have completed at least 24 credits at Concordia. Recipients are selected in the summer on the basis of the previous year's academic achievement. The scholarships are paid in the following Fall and Winter terms. Recipients must maintain their full-time status throughout the year the award is tenable. Unless otherwise indicated, no application is required. Academic performance is reviewed with the Office of the Registrar. For a complete list, see §300.2 or consult the FAAO Handbook.

CONCORDIA IN-COURSE BURSARIES

These awards are made on the basis of financial need and satisfactory academic standing. The value of each award may fluctuate yearly depending upon current interest rates. Unless stated differently, awards are given to full-time students who are Canadian Citizens or Permanent Residents. For a complete list, see §300.2 or consult the FAAO Handbook.

Concordia Senior Student Bursary Programme

Concordia University has, for many years, endeavoured to facilitate access to university studies for senior citizens. The University is happy to offer to eligible students who make the request, bursaries to help defray the cost of their studies. These bursaries are non-renewable, but recipients may apply in successive years.

Eligibility: Applicants must be 65 years of age or over, and registered as full- or part-time students at Concordia University. Applicants must be considered as either senior Independent, senior undergraduate, or senior graduate students.

Value of Bursaries: The value of these bursaries is \$25 per credit for each level of study.

Approval Process: Recipients will be selected on the basis of progress in their studies, and a personal statement indicating mention of their financial need and how this bursary would be of assistance to them.

For additional information, consult the FAAO Handbook available from the Financial Aid and Awards Office.

18.7.5 Awards Offered by External Organizations

Students

These awards are sponsored and administered by external associations, companies, foundations, societies, and clubs. Applications go directly to the organization administering the award, unless otherwise noted. For a complete list, see §300.3.

American Students:
18.7.6 Students coming to
International Loan through their h

Students coming to a Canadian university from the United States may apply for a Higher Education Loan through their home state. These forms, once completed by the student, must be sent to Concordia's Financial Aid and Awards Office for further completion. Due to the lengthy processing time by the U.S. Government, it is recommended that students submit their application forms as soon as possible upon acceptance from the University.

Students from Other Countries:

The scholarships, bursaries, and loans offered through Concordia University and external agencies are generally not available to overseas students. Students studying on a student visa who require financial aid should, therefore, contact their home country's Department of Education. The Canadian International Development Agency offers training assistance to most developing countries with which Canada has a cooperative agreement; however, students must be nominated by their own government. For further information, contact the Scholarship Committee, Human Resources Directorate, Canadian International Development Agency, 200 Promenade du Portage, Hull, Québec, K1A 0G4.

Students should try to obtain adequate finances before coming to Canada. If students do not plan to return home during the summer, four additional months of living expenses should also be provided for.

18.8 SOCIO-ECONOMIC SERVICES

18.8.1 New Student Programme

New Student Programme

The New Student Programme Office was created to help new students make a successful transition to university life and to help resolve any problems that may be encountered during their first year of university. Some of the programmes offered are Smart Start, (in conjunction with Counselling and Development), the New Student Drop In, Peer Connections, and Orientation. Orientation is designed to familiarize students with the various facilities and services available to them, and to provide essential information such as academic requirements and the rights and responsibilities of all members of the Concordia community. The Office publishes The Bridge, a newspaper filled with information and articles of particular interest to new students. The Bridge is mailed directly to every new student approximately four times a year.

1882 Residences and Off-Campus Housing

RESIDENCES — Loyola Campus Only

Hingston Hall is a modern dormitory style co-ed residence which houses 144 students. Rooms are furnished. Communal kitchens and public telephones are on each floor. Lounges have colour T.V.'s and the games room has pool tables. Laundry facilities, personal mailboxes, two computers, and a piano are located in the building for students' use. Many activities and outings are organized by

By law, students are required to sign leases. These leases will follow the academic year (September to May). Students wishing to contract for only one semester can apply for special arrangements.

Residence Fees

The 1997-98 room rates were as follows: (These rates do NOT include meal service.)

\$2,035.20 Double Room Single Room \$1,761.52 (\$254.40 a month) (\$220.19 per person a month)

While effort will be made to meet special requests for specific rooms, assignments will depend upon availability of space. Since the number of rooms is very limited, applications should reach the director as soon as possible. Since acceptance to the University does not guarantee admission to residence, a separate application for on-campus housing must be sent to:

> Director of Residences Concordia University - Loyola Campus Hingston Hall, Room: HA 156 7141 Sherbrooke Street West Montréal, Québec, H4B 1R6 (514) 848-4755 (514) 848-4780 (fax)

OFF-CAMPUS HOUSING

A computerized housing list is available at CSU, Hall Building, Room: H 260, (514) 848-7476.

INTERNATIONAL STUDENTS

19.1	ADMISSION REQUIREMENTS		
	19.1.1	Admission Requirements	
	19.1.2	Language Proficiency	
	19.1.3	Criteria for Admission	
	19.1.4	Application Fee	
	19.1.5	Registration	
19.2	IMMIGRATION PROCEDURES AND DOCUMENTATION REQUIRED FOR THE UNIVERSITY		
	19.2.1	Immigration Procedures	
	19.2.2	Documentation Required for the University	
19.3	TUITION	AND OTHER FEES FOR INTERNATIONAL STUDENTS	
19.4	SCHOLA	ARSHIPS, BURSARIES AND LOANS	
19.5	INTERN	ATIONAL STUDENT HEALTH AND ACCIDENT INSURANCE	
19.6	WORKIN	IG ON-CAMPUS	
19.7	ESTIMA	TED COST OF LIVING FOR INTERNATIONAL STUDENTS	

INTERNATIONAL STUDENTS

There are approximately 1,400 students from outside Canada studying at Concordia University. In this section, International students will find relevant information on admission requirements, immigration regulations and tuition fees. Further information and assistance can be obtained from the International Students Office, Room: H 653, (514) 848-3515.

The International Students Office, a member of the Advocacy and Support Services Group of Student Services, is responsible for providing programmes and services which are responsive to, and supportive of the International students' special needs. The services include:

- · orientation sessions:
- assistance for students with personal and academic difficulties;
- coordination of all campus and community services available to International students;
- assistance on immigration matters;
- · emergency loans;
- letters for military deferment, transfer of funds, and immigration invitation/visitation letters;
- liaison with sponsoring agencies and governmental sponsors of students.

Upon arrival at Concordia University, students are encouraged to attend an Orientation/Information Session organized by the International Students Office, in order to pick up their Information Package on Concordia and the City of Montréal.

ADMISSION REQUIREMENTS 19.1

19.1.1 Admission Requirements Concordia welcomes applications for admission from well-qualified students from other countries. In general, students are expected to have completed the level of education required for university admission in their home country. The school-leaving subjects taken by the candidate should normally be appropriate for the degree programme to which application has been made. Some programmes have additional requirements, e.g. audition, interview, portfolio. Since entry to many programmes is limited, the satisfaction of minimum requirements does not guarantee entry to the University. More specific information with respect to admission requirements and placement levels may be obtained by writing to the Office of the Registrar.

Depending on their educational background, applicants are considered for entry to three-year (90 credits) or four-year (120 credits) degree programmes. In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), or BFA (Specialization in Art Education), the programme requires four to five years.

United Kingdom and Commonwealth

Passes awarded in the examinations for the General Certificate of Education, the Cambridge Overseas and Higher School Certificates, the West African School Certificates, General Certificate of Secondary Education, or the equivalent, will be considered as satisfying the general entrance requirements if the conditions of either Scheme A or Scheme B are satisfied.

Scheme A: Passes in five subjects, of which at least two must be passed at the Advanced Level (GCE) or Principal Level (COHSC), and three at the Ordinary Level (GCSE) or the School Certificate Level.

> Passes in four subjects, of which at least three must be passed at the Advanced Level (GCE) or Principal Level (COHSC), and one at the Ordinary Level (GCSE) or the School Certificate Level.

Some additional information attached to the fulfilment of the above schemes:

- an average grade of "D" or better in Advanced or Principal Level subjects is normally expected. In the case of certain quota programmes where enrolment is limited, candidates will have to present higher grades in order to compete successfully for places at the University;
- two appropriate AS (Advanced Supplementary) Levels may be accepted in lieu of an Advanced Level for the purposes of satisfying the general entrance requirements of the University.

Some programmes have specific subject requirements. These have been outlined below. The following indicates, by degree, which Advanced or Principal Level subjects are required.

BAdmin, BComm, BSc — Mathematics and one other acceptable subject

BA, BEd, BFA — Any two acceptable subjects

BEng — Mathematics and Physics

Scheme B:

BCompSc

General Science — Mathematics and Physics Information Systems — Mathematics and any other acceptable subject Software Systems — Mathematics and Physics Systems Architecture — Mathematics and Physics Theoretical Computer Science — Mathematics and Physics

Students who have not written Advanced or Principal Level examinations but who have good grades in at least five appropriate Ordinary Level, GCSE, or School Certificate Level subjects plus one year of formal schooling beyond Ordinary Level, in a suitable academic programme in a recognized school or college, may be considered for admission to an undergraduate programme requiring the completion of 120 credits (four years). In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), and BFA (Specialization in Art Education), the programme would require four to five years.

Applicants to an extended undergraduate programme in Engineering or Science are normally expected to have completed mathematics and at least one science subject; those applying to Commerce and Administration are advised to have completed mathematics as part of their entrance qualifications. Content of additional credits for the extended credit programme will be found in the appropriate Faculty section of this Calendar.

United States

High school graduates with good grades from accredited schools who have followed an academic programme designed for university entrance may apply for admission to an undergraduate programme requiring the completion of 120 credits (four years). In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), and BFA (Specialization in Art Education), the programme requires four to five years.

Applicants are required to have a better than average school record and high ranking in their graduating class. While no set pattern of courses in high school is required, all applicants are expected to have taken four units of English. Those applying for admission to Science or Engineering must include three or four units in mathematics and two in the sciences. At least three units of mathematics are recommended for admission to Commerce and Administration. Although not required for admission, letters of recommendation from school guidance counsellors and the results of aptitude and achievement tests (SAT, ACT) are helpful additions to an application. Students who have passed Advanced Placement examinations in appropriate subjects with a grade of "3" or better may be granted some advanced standing.

France

Students who have completed the requirements for the Baccalauréat with satisfactory results may be considered for admission to an undergraduate programme requiring the completion of 90 credits (three years), or 120 credits (four years) for the BEd (TESL), BA (Early Childhood and Elementary Education), and BFA (Specialization in Art Education).

The number of credits required for the BEng varies according to the option chosen and to the previous preparation of the student, but is usually no fewer than 115.

In cases where the Baccalauréat specialization (serie) followed does not fully satisfy the entrance course requirements for the degree programme sought, the student, if admitted, will have to include the designated prerequisites as part of the first-year programme. In some instances, the prerequisites must be taken in addition to the undergraduate programme.

International Baccalaureate

IB Diploma candidates who achieve passes in six subjects with three at the Higher Level and who obtain a minimum total of 27 points may be considered for admission to the three-year (90 credits) programmes of study (four years of study in Engineering, Early Childhood and Elementary Education, TESL, or BFA — Specialization in Art Education). Students who have not completed the full IB Diploma programme but have IB Certificates in individual Higher Level subjects may be eligible for credit.

Other Countries

Candidates applying from other countries who have completed the level of education required for university admission in their home country will be considered for admission provided that better than average grades have been attained. In most cases, a specific minimum overall standard is required. More specific information with respect to admission requirements and placement levels may be obtained by writing to the Office of the Registrar.

Transfers from Post-Secondary Institutions

Transfers from post-secondary institutions are referred to §13.3.4.

19.1.2 Language Proficiency 19.1.3 Criteria for Admission The language of instruction at Concordia University is English. For information regarding the language proficiency requirement, refer to §13.4.

Admission to Concordia University is selective and will be considered when all relevant academic documents and the Summary of Educational Experience form have been received. All certificates must show the actual grade obtained in each examination.

19.1.4 Application Fee International applicants must pay a \$50 (Canadian) application fee payable by international money order or draft drawn on a Canadian bank in Canadian funds to Concordia University

19.1.5 Registration Students select courses for the September and January terms prior to the start of classes. Most students within North America will register for their courses by touchtone telephone using CARL, the Concordia Automated Response Line. Alternate registration arrangements will be available for students residing outside North America.

Complete information regarding registration is sent with the letter of acceptance.

19.2 IMMIGRATION PROCEDURES AND DOCUMENTATION REQUIRED FOR THE UNIVERSITY

19.2.1 Immigration Procedures All persons, other than Canadian Citizens and Landed Immigrants, who wish to pursue their studies in the province of Québec, must obtain a *Québec Certificate of Acceptance* (CAQ) and a *Canada Student Authorization*. The CAQ is delivered by the Québec Immigration authorities and the *Student Authorization* by the Visa Departments of the Canadian Consulates and Embassies. Under the *Canada Immigration Act*, it is illegal to study in an institution of higher education without a valid *Student Authorization*.

As it may take several weeks to obtain the CAQ and *Student Authorization*, the application process should be started **immediately** upon receipt of the letter of admission from Concordia University. When applying for the *Québec Certificate of Acceptance* and the *Student Authorization*, International students are required to present evidence of sufficient funds for tuition and living expenses. Evidence of financial support may be:

- an updated bank book with proof of ownership, and if necessary, documents attesting to other sources of income:
- a sworn declaration of financial support, accompanied by proof of sufficient funds from the Canadian or foreign sponsor for the current year, if applicable;
- if students are under 18 years of age, Canada Immigration may require that they provide legal proof of sponsors here in Canada;
- an authorization to transfer funds from the organization which controls currency in the student's country, if applicable;
- a bursary attestation or confirmation of a financial award, specifying the monthly or annual amount, if applicable.

Students are advised to ensure that they will have sufficient funding to complete their degree. Concordia University cannot assume financial responsibility for students who do not have adequate funds.

Processing fees will be charged by both Québec Immigration and Canada Immigration for the issuance of a *Québec Certificate of Acceptance* and a *Student Authorization*.

19.2.2 Documentation Required for the University International students are required to provide a copy of their CAQ and *Student Authorization* to the **International Students Office**, **1455 de Maisonneuve Blvd West**, **Hall Building**, **Room 653** when they first register at Concordia and thereafter every time they renew their immigration documents. This directive is in accordance with the funding regulations of the Québec Ministry of Education which requires that all International students registered at a university in Québec have in their permanent file a copy of their *Québec Certificate of Acceptance* and their *Student Authorization*. International students are required to provide a copy of their CAQ and *Student Authorization* to the **International Students Office** before the DNE deadline of their first semester at Concordia. Failure to comply to this regulation could result in the cancellation of the student's registration.

19.3 TUITION AND OTHER FEES FOR INTERNATIONAL STUDENTS

International students with *Student Authorizations* must maintain a full-time status, i.e. 24 credits or more per year. The fees, payable to the University for the regular session of two terms commencing in September and concluding in April, are approximately \$11,258 for a full-time student. This amount covers tuition fees for 30 credits, student service and association fees, and the registration fee. This

estimate does not include the cost of textbooks or living expenses. The compulsory health insurance fee of approximately \$475 is included in this amount.

Please refer to §15.2 for information concerning the payment of tuition and fees.

Exemptions from Differential Fees

Certain International students may be eligible to pay the same fees as Québec Residents. Students who qualify for an exemption from the differential fees for International students, pay the regular fee of \$2,926.60 (including tuition and compulsory fees for 30 credits, and the International students medical insurance fee). The following are among those exempted from paying differential fees:

- diplomats, consular personnel, accredited representatives or civil servants of a foreign country, the United Nations or one of its organizations, an intergovernmental organization to which Canada belongs, and any member of the staff of the above-listed persons who are working in Canada in an official capacity;
- 2. the spouse and unmarried children of the above-listed persons;
- an International student whose spouse or parents hold certain work categories of work permits in Québec. For further details and verification, please contact the Office of the Registrar, Room LB 700, (514) 848-2634;
- 4. a student who is registered at a university and who has come to Québec as an exchange student, or as a student participating in a programme of cooperation agreed to by the Government of Québec and which exempts the participants from paying differential fees;
- 5. a student who is a French Citizen (accord France-Québec);
- 6. a student who is admitted to a Québec university and whose country has a fee remission agreement with the Québec Government. The Government of Québec has agreements for granting a **limited** number of exemptions from the differential fees for International students from the following countries:

Algeria, Argentina, Belgium, Benin, Bolivia, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Djibouti, Ecuador, Gabon, Germany, Guinea, Haiti, Honduras, Iran, Israel, Kenya, Korea, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mexico, Morocco, Panama, Peru, Rwanda, Senegal, Togo, Tunisia, Uruguay, Vietnam.

Inquiries and applications for an exemption should be made directly to the student's own Ministry of Education prior to leaving their home country. In some cases, when the person is in Canada, it may be possible to apply for an exemption at their Embassy or Consulate in Canada or in the United States;

- 7. a student who is registered at a university and whose status as a Convention Refugee or a Landed Immigrant has been officially recognized by Canada Immigration. Should a student receive Convention Refugee or Landed Immigrant status during the academic year, he or she should immediately present the official document to the Office of the Registrar, Room LB 700, to have his or her status changed and to inquire about a possible refund. For more information on refund policies and deadlines for submission of documents, please contact the Office of the Registrar;
- 8. a student who is registered in a programme of studies which is specifically designated by the Ministry of Education may be eligible for exemption from the differential fees for **some** of the courses the student would be taking. At Concordia University, this refers to the following undergraduate programmes:
 - Specialization: Études françaises;
 - Major: Études françaises (Option: Langue ou Littératures de langue française);
 - Major: Études françaises (Option: Langue et didactique);
 - Minor: Littératures de langue française;
 - Certificate: Langue française.

Specific information on the category of fee exemption (partial **or** full exemption from differential fees) will be provided with the acceptance letter to one of these programmes.

19.4 SCHOLARSHIPS, BURSARIES AND LOANS

Scholarships, bursaries, and loans offered through Concordia University and external agencies are generally not available to International students. Students should try to obtain adequate finances before coming to Canada and ensure that they will have sufficient funding to complete their degrees.

Concordia In-Course Bursaries

These awards are made on the basis of financial need and high academic standing. Among the available in-course bursaries, those financed by Concordia University are available to International students. Applications are available at the Financial Aid and Awards Office in November and should be returned in December. For more information, contact the Financial Aid and Awards Office and consult §18.7.4; for a complete listing, consult §300.7.

Concordia Shuffle Entrance Scholarships

A number of entrance scholarships are awarded to students entering their first year of study. The recipients will be selected on the basis of academic achievement during the first three semesters of cégep or equivalent. Application forms are available from the Financial Aid and Awards Office. Deadline: August 1.

CIDA Award Programmes

The Canadian International Development Agency (CIDA) offers training assistance to most developing countries with which Canada has a cooperative agreement. Students are nominated by their own government. For further information, contact the Scholarship Committee, Human Resources Directorate, CIDA, 200 Promenade du Portage, Hull, Québec, K1A 0G4.

Canadian Commonwealth Scholarship and Fellowship Plan

A number of scholarships are awarded to citizens of a Commonwealth country other than Canada. First-degree programmes are permissible where these are not available in the home country. Application forms can be obtained from the International Council for Canadian Studies, 325 Dalhousie, S-800, Ottawa, Ontario, K1N 7G2.

Exemption from Higher Tuition Fees

The Government of Québec has agreements for granting a **limited** number of exemptions from differential fees for International students from specific countries. Consult §19.3.6 for the list of countries and information.

Other Awards

Information on awards to International students and trainees is also available in the brochure *Awards for Study in Canada* published by the Canadian Bureau for International Education. For further information, write to CBIE, 220 Laurier Avenue West, Suite 1100, Ottawa, Ontario, Canada, K1P 5Z9.

American Students

Students coming to Concordia University from the United States may apply for a Higher Education Loan Plan through their hometown bank. These forms must be sent to the Financial Aid and Awards Office at Concordia for completion. It is essential that applications be made as early as possible.

Emergency Loans

Funds are available at the International Students Office for short-term emergency loans. Loans are issued to full-time undergraduate and graduate students who need temporary emergency financial assistance. For further information on eligibility requirements and conditions, contact the coordinator, International Students Office, Room: H 653, (514) 848-3514.

19.5 INTERNATIONAL STUDENT HEALTH AND ACCIDENT INSURANCE

Québec Immigration Services and the Québec Ministry of Education require that all International students be covered by a health insurance plan while studying and living in Québec. To this end, Concordia University has implemented a compulsory health and accident insurance plan for its International students. Health insurance fees are charged automatically every year when International students register for courses.

The single coverage for the 2000-01 academic year is \$475 (subject to change). Coverage is from August 15, 2000, until August 14, 2001. Students who register in January pay a pro-rated premium for the eight-month period ending August 14, 2001.

International students who have diplomatic status, a comparable health plan, a Medicare card, or other valid reasons, may be eligible for an exemption from the Concordia Health Insurance Plan for International Students. Proof of insurance will be required in order to process an exemption; it must be presented in English or French indicating the period and amount of coverage available in Canada. This information is required by the Québec Ministry of Education and must be in the students' Concordia file for audits and reports.

Applications for exemptions are processed in person at the International Students Office, Hall Building, Room H 653. Applications must be processed every year before the prescribed deadlines. Applications submitted after the deadlines and approved by the ISO will be charged an administration fee. Refunds will be considered only for students who have not filed any claim to the Insurance Company during the current insured period. Refunds are given in a form of credit to the student's university account.

Exemption Deadlines for Students Beginning the 2000-01 Academic Year in September 2000

First deadline: October 31

Full refund

Second deadline: Last day of exams for the Fall Term — December 22, 2000

Refund of \$375

(administration fee: \$100)

Final deadline: Last day of exams for the Winter Term — May 6, 2001

Refund of \$275

(administration fee: \$200)

No refund will be approved after this final deadline.

Exemption Deadlines for Students Beginning the 2000-01 Academic Year in January 2001

First deadline: February 28 Full refund

Final deadline: Last day of exams for the Winter Term — May 6, 2001

Refund of \$295

(administration fee: \$100)

No refund will be approved after this final deadline.

Exemption Deadline for Students Beginning in Summer 2001

Final deadline: June 15, 2001

Full refund

No refund will be approved after this final deadline.

19.6 WORKING ON-CAMPUS

Immigration regulations allow International students to accept employment on the campus of the educational institution where they are registered, as long as they hold a valid *Student Authorization*. They do not require an *Employment Authorization*. After graduation, International students may work in Canada, provided the employment is in their field of study. In this case, they must apply for an *Employment Authorization* within 60 days of release of final marks.

Spouses of International students are allowed to work on- and off-campus and are required to apply for an *Employment Authorization*. However, spouses who are full-time students are restricted to on-campus employment only.

NOTE: Students who are working for more than three months are eligible for the Québec Medicare card. The card is issued by the "Régie de l'assurance-maladie du Québec" and is valid for the duration of the employment.

19.7 ESTIMATED COST OF LIVING FOR INTERNATIONAL STUDENTS

University Fees*	
Tuition	\$ 8,268.30 - 9,999.90
Compulsory Fees:	
Administrative Fee	270.00
Student Service Fee	264.90
Student Association Fee	e** 108.00
Medical Insurance	475.00
Miscellaneous Fees:	
(New Student) Orientation	on Fee 35.00
Registration Fee	40.00
Capital Campaign Fee	60.00
Safety Patrol	2.00
Le Frigo-Vert	3.40
Personal Expenses***	
Books and Supplies	600.00
Lodging	3,600.00
Groceries	3,000.00
Transportation	540.00
Clothing	650.00
Miscellaneous	800.00

^{*}The University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term.

^{**}Fee may vary depending on the Faculty but will not exceed \$108.

^{***}General and personal expenses listed are estimates and are subject to personal needs.

NOTE: The figures stated above are in Canadian funds. Tuition fees are based on 30 credits. General

NOTE: The figures stated above are in Canadian funds. Tuition fees are based on 30 credits. General and personal expenses are estimated for full-time students for 12 months. Fees are subject to change without notice.

NOTE: Students who qualify for an exemption from the differential fee for International students pay the regular fee of \$2,926.60 (which includes tuition and compulsory fees for 30 credits, and the International students health insurance fee). Refer to §19.3 for Exemptions from Differential Fees.

STUDENT AND ALUMNI ASSOCIATIONS

20.1 UNDERGRADUATE STUDENTS

20.2 GRADUATE STUDENTS

20.3 ALUMNI

STUDENT AND ALUMNI ASSOCIATIONS

20.1 UNDERGRADUATE STUDENTS

The Concordia Student Union (CSU) represents most undergraduate students, both full-time and part-time. Besides organizing many events and activities, CSU ensures student representation on University decision-making bodies, both those that legislate on academic and administrative matters and those concerned with the cultural and social life of the community. There are student members of the Board of Governors, Senate, the Faculty Councils, and the Concordia Council on Student Life, which is directly concerned with the provision of student services.

Powers and responsibilities are divided between three bodies; the Executive, the Council of Representatives, and the Judicial Board. The Executive is headed by an elected president. The Council of Representatives consists of students elected from the four Faculties and Independent students. The Judicial Board is an appointed body charged with assuring the constitutionality of any new legislation.

Students in two Faculties are also represented by their own associations: the Commerce and Administration Students' Association (CASA) and the Engineering and Computer Science Students' Association (ECA).

The CSU has more than 75 member-clubs and associations. They may be associated with a department or discipline, such as the Psychology Students' Association or pursue a special interest like the Debating Society. Each has its own programme of activities, funded by the CSU. There are numerous clubs and associations for students of particular ethnic backgrounds under the Office of the Dean of Students.

Other activities that come under the CSU umbrella are the television station CUTV, the radio station CJLO, and the CSU Orientation. Two student newspapers, The Link and The Concordian, operate independently of the student association. Both newspapers are incorporated, with separate, wholly autonomous Boards of Directors.

There is a CSU office on each campus. The Sir George Williams office is in Room H 637 of the Henry F. Hall Building. The Loyola office is in the Loyola Campus Centre. CSU's telephone number is (514) 848-7474.

GRADUATE STUDENTS 20.2

Graduate students become members of the Graduate Students' Association (GSA). It is concerned with graduate student representation on the Board of Governors, Senate, the School of Graduate Studies and Faculty Councils, and initiates a wide range of activities for graduate students and the University community as a whole, including social occasions, lectures, and concerts. The Association publishes a regular newsletter. Its offices are at 2030 Mackay Street (514) 848-7900.

20.3 **ALUMNI**

The Concordia University Alumni Association (CUAA) was created in 1983. In the words of its Constitution, the Association exists to "encourage the fellowship of graduates from Loyola, Sir George Williams, and Concordia University through social, educational and cultural activities" and to "preserve and promote the interests of Concordia University through alumni involvement in its future and governance". All graduates of the University are automatically lifetime members of the Association, as are graduates of Concordia's two founding institutions: Loyola College and Sir George Williams University.

The Concordia University Alumni Association works with Concordia's Office of Alumni Affairs to provide alumni with a variety of programmes and services. The Association organizes a series of career and personal development seminars and workshops, and a travel programme; all are outlined in the Calendar of Events mailed to Montréal-area graduates. All graduates receive the quarterly Concordia University Magazine.

Alumni are encouraged to purchase an Alumni Gold Card. This identification card allows graduates to take advantage of University library borrowing privileges and access to audio-visual services, Concordia's sports medicine clinic, counselling and development, legal services, and Concordia's daycare centre. Cardholders pay no registration fees for courses at Concordia's Centre for Continuing Education and receive discounts for Stingers varsity sports games, car rentals, fitness club memberships, local theatre, subscriptions to popular magazines, and recreation and fitness

facilities. Alumni may benefit from the Concordia University affinity credit card; home, automobile and life insurance reduced rates; long distance telephone, wireless phone and Internet services; and moving, emergency auto repair, hotel and travel services.

The CUAA organizes programmes and events year-round. Homecoming offers graduates an opportunity to visit, participate in special reunions and seminars, and enjoy campus tours, entertainment, and the Homecoming football game. The Annual Alumni Recognition Awards Banquet honours outstanding volunteer contributions of alumni, faculty, students and friends of the University. The Concordia Alumni Student Team (C*A*S*T) connects prospective students, current students, alumni and the University. The online Mentor Programme and Business Card Exchange gives current students the opportunity to draw upon the vast experience of Concordia alumni. The Alumni Office also has a convocation photography service and offers E-mail Forwarding for Life to all its graduates.

The Concordia University Alumni Association is committed to the development and support of a worldwide network of alumni chapters. Representing more than 100,000 graduates, there are active alumni groups in Ottawa, Toronto, Calgary, Edmonton, Vancouver, Victoria, New York, Boston, San Francisco, Los Angeles, London, Trinidad & Tobago, and Hong Kong. The Correspondence Programme can help alumni find lost friends or classmates.

For more information please contact the Office of Alumni Affairs, 1463 Bishop Street, Room BC 101 – (514) 848-3818 or fax (514) 848-2826, E-mail alumni@coral.concordia.ca, or visit the CUAA at http://alumni.concordia.ca/AlumWeb.

CENTRE FOR CONTINUING EDUCATION

21.1	COMMUNICATIONS/VISUAL ARTS
21.2	BUSINESS AND ADMINISTRATION
21.3	CONTINUING EDUCATION COMPUTER INSTITUTE
21.4	CONTINUING EDUCATION LANGUAGE INSTITUTE
21.5	GENERAL SEMINARS AND WORKSHOPS
21.6	HOSPITALITY MANAGEMENT AND TOURISM
21.7	INSTITUTE IN MANAGEMENT AND COMMUNITY DEVELOPMENT
21.8	PROFESSIONAL CAREER PROGRAMMES

CENTRE FOR CONTINUING EDUCATION

Director T.B.A. (514) 848-3601

Assistant Director and Administrator of Business and Administration Programmes MURRAY SANG (514) 848-3603

Administrator of Visual Arts/Communications: Hospitality Management and Tourism SANDRA ROZANSKY (514) 848-3605

Administrator of the Computer Institute JOHN DICKSON (514) 848-3606

Administrator of the Language Institute MAUREEN R. HABIB (514) 848-3607

Academic Coordinator, Language Institute P. CHARLES BROWN (514) 848-3610

Coordinator of the Institute in Management and Community Development LANCE EVOY (514) 848-3956

Coordinator of the Summer Programme of the Institute in Management and Community Development MIREILLE LANDRY (514) 848-3956

Location

Sir George Williams Campus 1600 St. Catherine St. West, 1st floor (514) 848-3600

As part of its commitment to the lifelong pursuit of education, Concordia University, through its Centre for Continuing Education, offers a variety of non-credit educational programmes for adults. These are designed to meet the practical needs and interests of people in the workplace, helping them to refine and improve their skills.

Students may choose individual courses or a programme series to earn Certificates in a particular area. The Centre's courses and programmes do not count towards any of the degree or Certificate programmes offered by the Faculties of the University.

Detailed course and programme descriptions are available from the Centre for Continuing Education.

21.1 COMMUNICATIONS/VISUAL ARTS

Communications

Graphics: This Certificate programme introduces students to both the theory and practice of graphics in visual communications. These hands-on courses focus on developing students' understanding of typography using the principles of good design. A Certificate in Graphics is awarded upon successful completion of 10 courses.

Graphic Applications in Desktop Publishing (Day only): This Certificate programme is intended for students interested in acquiring the software skills sought after in today's competitive graphic design world. Students will learn the fundamentals of sound graphic design and will learn how to apply their acquired software skills to render graphic design that successfully responds to the client requirements. A Certificate in Graphic Applications in Desktop Publishing is awarded upon successful completion of six courses.

Journalism: This Certificate programme focuses on developing and enhancing information-gathering and writing skills. Students interested in pursuing careers in freelance, news media or magazine writing will benefit from these practical courses. A Certificate in Journalism is awarded upon successful completion of 10 courses.

Photography: This Certificate programme consists of five-week and ten-week modules on a rotating schedule, featuring regular assignments with critiquing and evaluation. A Certificate in Photography is awarded upon successful completion of seven courses.

Public Relations (Day or Evening): This Certificate programme offers practical courses to students interested in exploring the underlying concepts and techniques of public relations in a variety of areas: government, media, community, and corporate relations. A Certificate in Public Relations is awarded upon successful completion of 10 courses.

Radio and Video Production: This Certificate programme takes you behind the scenes with courses in audio/video production. Students wishing to pursue careers on the technical side of the media industry will benefit from this blend of theory and practice. A Certificate in Radio and Video Production is awarded upon successful completion of 10 courses.

Technical Communication: This Certificate programme has been developed in response to the enormous demand for technical communicators in Canada and covers a range of areas, such as technical writing and translation, technical editing, and project management. A Certificate in Technical Communication is awarded upon successful completion of 10 courses.

Communications (Day only): The Communications Certificate takes a broad approach to the study of media and communications. The aim is to develop the student's appreciation of the role played by the mass media in society. Students will be prepared for a wide range of career opportunities in the media industries, in public relations and in government. Topics include News and Feature Writing, Basic Editing, Writing for Radio and TV, Effective Speaking, Technical Writing, Graphic Design Techniques, Video Production I, and Fundamentals of Public Relations. A Certificate is awarded upon successful completion of 10 courses.

Visual Arts

The following courses are offered as interest courses only: Drawing, Painting, Life Drawing, and Portraiture. There are no exams, and no certificate is awarded.

21.2 BUSINESS AND ADMINISTRATION

Human Resources Management (Day or Evening): This programme provides comprehensive education in basic current human resources management techniques. To qualify, candidates must complete a total of 10 courses.

International Trade (Day or Evening): This series of courses is offered to people who wish to expand their knowledge in importing and exporting. Each course concentrates on one important aspect of international business. Ten courses are required for the completion of a Certificate. An intensive eight-week day programme is also available.

Management (Day or Evening): This series of courses in management and administrative subjects is for people who wish to expand their knowledge in selected business fields. Each course concentrates on one important area of business activity. A Certificate is awarded upon the completion of 10 courses.

Marketing (Day or Evening): This series of courses is offered to people who wish to expand their knowledge in the selected area of marketing. Each course concentrates on a specific area and helps the "marketing manager" develop the necessary tools and knowledge to be effective in the marketing process.

To qualify for a Certificate in Marketing, candidates must successfully complete a total of 10 courses, six compulsory and any four elective courses offered in this programme. An intensive eight-week day programme is also available.

Purchasing and Inventory Control: This programme is designed for those who wish to expand their expertise in buying and materials management. A Certificate in Purchasing and Inventory Control is awarded upon successful completion of 10 courses.

Small Business Management: Designed as a "how to" guide for the entrepreneur, this programme offers essential information and advice for assuming the risk of a business or enterprise. To qualify for the Certificate in Small Business Management, candidates must successfully complete a total of 10 courses — six compulsory and any four elective courses offered in the Small Business Management programme.

Interest courses: The Business and Administration section also offers single courses not included in any programme. These include Trading in Options and Stocks; Stocks, Bonds and Other Investments; and Trading in Commodity Futures.

21.3 CONTINUING EDUCATION COMPUTER INSTITUTE

Computer Aided Design (CAD): This 200-hour hands-on Certificate programme is offered to individuals wishing to complement or improve their competitiveness in engineering, product design, or any field where design and technical drawing are essential. The PC-based software taught in this Certificate is AutoCAD®. Chosen for its flexibility in building models and prototypes and its ability to produce both simple and complex viewpoints, AutoCAD® is a leading industry standard.

Mechanical Computer Aided Design (MCAD): This 320-hour Certificate is designed to develop advanced professional skills and techniques required in the industry of Mechanical Computer Aided Design. Instruction is based on the AutoDesk Mechanical Desktop® software that is recognized as an international industry standard. Students will start with two-dimensional design fundamentals and progress to three-dimensional design using solids, surface and wireframe modelling. Students will complete their training utilizing the more complex capabilities of parametric modelling, associative assembly modelling, two-dimensional associative design and drafting, and three-dimensional surface and wireframe modelling. Project work is an integral part of all MCAD courses. Students will be required to maintain a printed portfolio of their course work. This portfolio can also provide potential industry employers with a means of evaluating graduates of the MCAD Certificate programme.

Electronic Office Systems Technology: This practical Certificate programme allows individuals to gain the skills needed to succeed in today's business environment. The programme has a hands-on approach to learning how to use the computerized office tools found in all sectors of the workforce. Included in the Certificate are courses in today's most popular word processing, spreadsheet, presentation, database, accounting and communication application software.

Information Systems Management: This 10-course Certificate programme is intended to complement a student's current academic training with a solid overview of the use of computer hardware and software in business, as well as the current techniques and practices needed to properly manage and maintain business information. The Certificate provides students with a sound knowledge and understanding of the concepts required within a Management Information Systems (MIS) environment.

Software Development for Business Applications: This Certificate programme is intended for students who wish to acquire a solid background in business programming principles and practices. The programme provides students with the standard software development tools still prevalent in today's business programming environment. Industry standards such as QBasic, COBOL, C, and C++ programming languages, as well as database design and applications, are included in this Certificate.

Software Development for Visual Applications: Ideal for students with sound structured programming techniques under their belt, this Certificate programme will deal with the new wave of object-oriented programming principles and practices. The programme provides students with the opportunity to learn and work with the most up-to-date visual software development tools, and acquire the skills, which are increasingly in demand in today's visual applications programming environment. Languages such as OO/C++, VisualBasic, Visual C++ as well as database interfacing can be mastered through this hands-on Certificate programme.

Software Development for the World Wide Web: Designed for students with structured programming techniques in hand, who are looking to develop integrated Internet commerce applications. This programme will explore the practical side of software development for the Internet from introductory business promotion applications to more complex database interfacing techniques. This Certificate offers the possibility of using some of the newest software development tools and languages. The skills acquired through these courses match those being sought in the Web page design market of today. Tools such as HTML, DHTML, Java/J++, Unix, Internet scripting languages, as well as database interfacing for e-commerce can be mastered through this practical Certificate programme.

Electronic Office Systems Technology (Intensive Day): Students can save time and money with this eight-week intensive hands-on Certificate programme for those interested in acquiring the skills needed to succeed in today's business environment. Less expensive than the part-time evening Certificate, this intensive day Certificate allows students to gain the hands-on computer skills that can be easily applied to any business environment in any sector of the workforce. In eight short weeks, students will master the PC-based software application tools that today's employers are seeking, including Microsoft Windows, Word, Excel, PowerPoint, and Access, as well as Computerized Accounting and Internet navigation and E-mail.

Computer Applications Programming (Intensive Day): The Computer Institute has successfully offered this intensive 44-week Certificate programme since 1984. This programme has been maintained, updated, and designed for individuals who require practical training in today's fast-moving business computer environment. The Computer Applications Programming Certificate provides the best possible PC and mainframe hands-on business programming and database analysis training in the shortest time possible. Students will be exposed to a range of operating systems, programming languages, and software applications including Web page creation. Students successfully completing this Certificate will have the Junior Programmer/Analyst skills required to join this dynamic and competitive workforce.

Weekend Computer Seminars: These full-day, hands-on seminars allow people to improve and upgrade their computer skills over a weekend. With small class sizes, state-of-the-art computer workstations and all documents included, participants learn quickly to use today's most popular software packages.

21.4 CONTINUING EDUCATION LANGUAGE INSTITUTE

English Language Programmes

The *Intensive Programme* (240 hours/8 levels) is primarily designed to prepare students to enter English-language universities or colleges; however, professionals or business people who require a high level of competency equally benefit from it. A Certificate of Proficiency is awarded upon successful completion (75%) of the Advanced 2 level.

Students who successfully complete the Advanced 2 level, with a final grade of 70%, and who wish to continue their full-time studies at Concordia University, will automatically meet the English language proficiency requirements for admission.

The Conversation Programme (40 hours/8 levels) is designed to help students improve their speaking and listening skills for social or work-related purposes. A Certificate of Proficiency is awarded upon successful completion of Level 8.

The Writing Workshop Programme (40 hours/5 levels) is designed to help students improve their writing skills and master the foundations of good writing from short writing tasks to reports. A Certificate of Proficiency is awarded upon successful completion of Level 5.

The Language Institute also offers several special courses: English for Academic Purposes for Graduate Students, and Interactive English Grammar, as well as courses to assist students to prepare to write English-language proficiency tests (all are 40 hours).

French Language Programmes

The French Language Programme allows students to register in one of its six levels, according to their proficiency. The programme is offered in the morning, the evening, and Saturdays (40 hours). It is designed to give students the tools and practice they need in French to encourage and develop their linguistic abilities in their professional and social environment. A Certificate of Proficiency is awarded upon successful completion of Level 6.

In addition, special courses in written French are available to qualified students (40 hours).

Spanish Language Programmes

The Spanish Language Programme allows students to register in one of its five levels, according to their proficiency. The programme is offered in the afternoon, evening, and Saturdays (40 hours). It is designed to give students the tools and practice they need in Spanish to encourage and develop their linguistic abilities in their professional and social environment. A Certificate of Proficiency will be awarded upon completion of Advanced Spanish.

Special language courses in English, French, and Spanish can be created to suit the needs of individual groups. Interested parties should contact the Institute for further information.

21.5 GENERAL SEMINARS AND WORKSHOPS

The Computer Institute and the Business and Administration Section regularly offer practical seminars and workshops to professionals, business personnel, and others who wish to enrich their computer and business knowledge and skills. The seminars and workshops are provided either in the Centre's own well-equipped facilities or at other seminar and business locations. For information on these workshops, contact the Centre for Continuing Education.

21.6 HOSPITALITY MANAGEMENT AND TOURISM

Hospitality Management (Day or Evening): This programme provides training in the special skills required to manage hotels, restaurants, and institutional and commissary food-service establishments. Students must successfully complete 10 courses to obtain the Certificate in Hospitality Management.

Tourism (Day or Evening): The Tourism programme trains people for work in travel agencies, airlines, travel departments and other enterprises within the tourism industry. The courses are valuable to those beginning a career in tourism as well as to experienced travel agency employees interested in upgrading their skills. An intensive eight-week day programme is also available. Candidates must successfully complete 10 courses to obtain the Certificate in Tourism.

21.7 INSTITUTE IN MANAGEMENT AND COMMUNITY DEVELOPMENT

The Institute in Management and Community Development provides training opportunities to assist economically marginalized groups in renewing and developing skills in managing community-based organizations; developing new skills in fundraising for social change; and training new leadership. Each summer, the Institute offers a week of training, national and international in scope, which is open to all and examines community-related issues such as: Community Economic Development, Building Community Involvement and Leadership, Affordable Housing Alternatives, Art and Community Development, and Running Effective Community-Based Organizations. Summer training sessions are taught by practitioners who excel in the field. For more information, contact Lance Evoy or Mireille Landry, 7141 Sherbrooke Street West, Room: CC 326, Montréal, Québec, H4B 1R6, (514)848-3956 or fax (514) 848-4598.

OPEN AND DISTANCE LEARNING

22

OPEN AND DISTANCE LEARNING (ODL)

Location

1455 de Maisonneuve Blvd West, Room: H 339

Montréal, Québec H3G 1M8 Telephone: (514) 848-3440 Fax: (514) 848-3441

E-Mail: canalcu@vax2.concordia.ca
Web Address: http://odl-iits.concordia.ca/open

Concordia University is committed to a long tradition of providing quality instruction and learning in forms readily accessible to all. A part of this commitment is providing students flexibility and access through the use of various technologies such as telecourses, online Web delivery, computer-mediated communication, and computer and video conferencing. Several credit courses are offered at a distance. It is important to keep in mind that these courses are as rigorous and rewarding as those given on campus.

ANTH 202 Introduction to Culture, 3 credits EDUC 210 Psychology of Education, 6 credits

EDUC 305 Technology for Educational Change, 3 credits

INTE 296 Discover Statistics, 3 credits

MAST 234 Linear Algebra and Applications I, 3 credits

More information about these courses is available on ODL's Web site at http://odl-iits.concordia.ca/open or in the sections of the respective departments.

TEACHER TRAINING AND CERTIFICATION

- 23.1 INTRODUCTION
- 23.2 INITIAL CERTIFICATION
- 23.3 APPLICATION FORMS
- 23.4 CITIZENSHIP REQUIREMENTS
- 23.5 ASSISTANCE

TEACHER TRAINING AND CERTIFICATION

Teacher Training and Certification:

Mailing Address: Office of the Provost and Vice-Rector, Research Concordia University 1455 de Maisonneuve Blvd West Bishop Court, Room 223 Montréal, Québec (514) 848-4865/4868

23.1 INTRODUCTION

The Ministry of Education (M.E.Q.) recognizes Concordia University as a centre for teacher training in the areas of adult education, early childhood and elementary education, English as a second language, and fine arts. Successful graduates will receive a lifetime licence to teach in anglophone school boards valid for the province of Québec from the M.E.Q.

Because Concordia University has chosen not to organize its teacher training programmes into a single faculty, the courses and programmes are listed under several different departments and faculties. Potential students are advised to consult the specific academic departments for further information.

In addition to the Teacher Training programmes, Concordia University offers many other Certificate and Diploma programmes which may be of interest to teachers. Please refer to the Undergraduate Calendar for the Certificate programmes, and the School of Graduate Studies Calendar for the Diploma programmes.

23.2 **INITIAL CERTIFICATION**

- Certificate in Education (30 credits). See §31.090 (Admission suspended for 2000-01.)
- Bachelor of Arts, Specialization in Early Childhood and Elementary Education (120 credits). See §31.090
- Bachelor of Education, Teaching of English as a Second Language (120 credits). See §31.320
- Bachelor of Fine Arts, Specialization in Art Education (120 credits). See §81.40
- Diploma in Adult Education, Certification Option (30 credits).

23.3 **APPLICATION FORMS**

Application forms are available from the Office of the Registrar for undergraduate programmes (BA, BEd, BFA, Certificate) and from the School of Graduate Studies for Diploma programmes.

23.4 CITIZENSHIP REQUIREMENTS

Permanent teacher certification in Québec is only available for Canadian Citizens. Students who have Landed Immigrant status or who hold an appropriate work permit at the time of their graduation may be eligible for a temporary licence to teach. Although students with a visa can complete teacher training programmes at Concordia University and receive a university degree, they are not eligible for certification by the Ministry of Education of Québec.

23.5 **ASSISTANCE**

Graduates of Concordia University with certification problems should contact: Direction de la formation et de la titularisation du personnel scolaire Ministère de l'Éducation 1035, rue de la Chevrotière, 28^e étage

Québec (Québec) G1R 5A5

Telephone: (418) 643-2948 Fax: (418) 643-2149

INSTITUTE FOR CO-OPERATIVE EDUCATION

INSTITUTE FOR CO-OPERATIVE EDUCATION

GRAHAM MARTIN, Associate Professor

Vice Principal JOHN FISET

Fellows and Programme Directors ARSHAD AHMAD, Lecturer, Finance (Director, Finance Co-op)

MERAL BÜYÜKKURT. Associate Professor. Decision Sciences and Management Information Systems (Director, Management Information Systems Co-op)

MARTHE J. CATRY-VERRON. Adjunct Associate Professor, Études françaises (Director, French Translation Co-op) DAVID CHEEKE, Professor, Physics (Director, Physics Co-op)

Mechanical Engineering (Director, Mechanical

GERARD J. GOUW. Associate Professor. and Industrial Engineering Co-op) RAJAGOPALAN JAYAKUMAR, Associate Professor, Computer Science (Director, Computer Science Co-op)

MARCUS F. LAWRENCE, Associate Professor, Chemistry and Biochemistry (Director, Chemistry and Biochemistry Co-op) SANDRA M. ROBINSON, Lecturer, Accountancy (Director, Accountancy Co-op) BALBIR S. SAHNI, Associate Professor, Economics (Director, Economics Co-op) BARBARA SHAPIRO, Lecturer, Management (Director, Human Resource Management Co-op) HAROLD J. SIMPKIN, Lecturer, Marketing (Director, Marketing Co-op) MANFRED E. SZABO, Professor, Mathematics

and Statistics (Director, Mathematics and Statistics Co-op)

CHRISTOPHER W. TRUEMAN, Associate Professor, Electrical and Computer Engineering (Director, Electrical and Computer Engineering Co-op)

RADU G. ZMEUREANU. Professor. School for Building (Director, Building and Civil Engineering Co-op)

The University through the Institute for Co-operative Education offers programmes in the co-operative format in the Departments of Chemistry and Biochemistry, Economics, French Translation, Mathematics and Statistics, and Physics in the Faculty of Arts and Science; in all Departments of Engineering and the Department of Computer Science in the Faculty of Engineering and Computer Science; and in the Departments of Accountancy, Finance, Decision Sciences and Management Information Systems, Human Resource Management, and Marketing in the Faculty of Commerce and Administration. As it becomes feasible, the University may consider offering other disciplines in the co-op format.

The Co-op Philosophy

Co-operative education is an educational process in which Academic Study terms are alternated with Work terms in the public and private sectors. Students obtain practical on-the-job experience in their academic discipline while continuing their studies towards a degree. It is a system that integrates the interests of employers, educators, and students.

Advantages of a Co-op Education

Integrating theory and practice in a structured and purposeful manner allows the student to come to terms with the realities of professional practice in a way that allows for the development of self-confidence, self-reliance, and self-motivation. From the Work terms, students learn to accept responsibility and the importance of deadlines. Realistic career expectations may be more easily formed. In the Institute, besides technical knowledge and practical experience, students gain skills in interpersonal relations through participation in seminars, workshops, talks, and social activities.

Employers benefit as well. The employer who agrees to cooperate with the Institute benefits from the opportunity to evaluate prospective personnel without making permanent employment commitments and from the availability of students on a year-round basis. In recruiting permanent employees, they have available to them trained graduates with work experience who can be productive with little or no training period.

The collaboration between employers and faculty is mutually beneficial, providing an opportunity for employers to contribute to, and influence, the educational process, and for the faculty to become aware of latest developments in industry. In some cases joint industry-university research projects result.

Admission to Co-op

Admission to co-op is selective based on academic performance, as well as other factors such as extracurricular activities, communication skills, motivation, personality, and drive. Applicants must be legally eligible to work in the public and private sectors.

Students applying should so indicate by filling the appropriate box on the University Admissions form. After acceptance by the University, selected applicants will normally be interviewed by the appropriate co-op committee. Applicants may be asked to provide a résumé of past work experience and a statement of the reasons for their interest in the co-op format.

Students accepted to the programme will be assigned a co-op adviser from within their academic department. It should be noted that, in the Faculty of Arts and Science, only Honours and Specialization programmes are offered in the co-op format.

Co-op Fee

Students should note that a co-op fee was instituted to cover in part the administrative costs particular to the co-op programme. This fee is currently \$185 per term and is charged for the second to penultimate terms inclusive. Students requiring less than the normal number of terms to complete their programmes in the co-op format are subject to the same total fee as those requiring the normal number of terms.

Co-op fees are due one month before the first day of eligible terms and are not refundable after the first day of the second month of the term, i.e., February 1, June 1 and October 1.

Co-op Performance Requirements

Students permitted to undertake their studies in the co-op format enrol as regular undergraduates in their programme and are subject to its academic regulations. However, higher performance standards are often required to continue in the co-op format.

Students undertaking the co-op format in a programme offered by the Faculty of Arts and Science are normally required to maintain a GPA of 2.50, and normally with no grade lower than a "D" in any course, elective or required. Students registered in Honours programmes must meet the Faculty Honours programme academic requirements.

Students registered in the co-op programmes in the Faculty of Engineering and Computer Science are normally required to maintain an overall GPA of 2.70 with no single term below 2.50. Students registered in the co-op programmes in the Faculty of Commerce and Administration are normally required to maintain an annual GPA of 2.70 or better and no failing grades.

The evaluation of each of the required Work terms will be based on the submission of a work-term report by the student and the evaluation of the student's performance by the employer. The student must successfully complete both components to pass the Work Term which is marked on a pass/fail basis. The work-term reports are not considered for degree credits.

Failure to meet the co-op academic requirements or failure to complete a Work Term will normally result in the withdrawal of the student from the Institute for Co-operative Education.

Work Term

Co-operative education at Concordia is not to be construed as a placement operation or an inexpensive labour apprenticeship. The Work Term is an essential part of the student's learning experience and there is to be equitable remuneration paid for work performed. The University is responsible for negotiating Work terms with employers who provide job descriptions to the Institute for Co-operative Education. The procedures for matching students to employers are managed by the Institute. Students must be willing to work anywhere in Canada, and may go abroad for a Work Term. A co-op coordinator or participating faculty member visits the students at their place of work to evaluate the work performance, gauge the learning opportunities, assess the compatibility of student and employer and, if necessary, take corrective action. It should be noted that the University does not guarantee every student a job.

UNDERGRADUATE PROGRAMMES

Co-op programmes offered in the Faculty of Arts and Science:

Chemistry and Biochemistry Co-op

Director: Dr. Marcus F. Lawrence, (514) 848-3374

The Chemistry and Biochemistry co-operative programme is offered to students who are enrolled in the BSc Honours or Specialization in Chemistry, Biochemistry, Analytical Chemistry. Students in Chemistry and Biochemistry co-op take the regular academic programme; however, in the Work terms the employment opportunities range among a wide variety of industrial and government agencies located throughout Canada. Students are encouraged to choose their work-term positions in a way which provides them with experience ranging from basic analysis in industrial processes and environmental control to senior research placements in the laboratories of various employers. For specific details concerning the curriculum please see §31.050.

Economics Co-op

Director: Dr. Balbir S. Sahni, (514) 848-3902

The Economics co-operative programme enables students to complete a BA Honours or Specialization in Economics. The academic content of the Economics co-op programme is identical to the regular programme; however, the required Work terms provide the co-op student with the unique opportunity of experiencing economics in an applied format.

Because of the course choices available, an Economics co-op student is prepared to undertake employment during his or her Work terms in a variety of public sectors including Provincial and federal government agencies. Private sector positions might include placements in banks, consulting firms, or planning departments in a variety of industries. For specific details concerning the curriculum please see §31.080.

French Translation Co-op

Director: Marthe J. Catry-Verron, (514) 848-7518

The Translation co-operative programme enables students to complete a specialized BA in Translation. The Translation co-op programme is identical to the regular programme; however, the required Work terms provide the co-op students with the unique opportunity to apply their translation skills in the government and corporate sectors. Work opportunities are found in environments such as government ministries, communication departments, and various organizations such as technical publishers, consultants, advertising agencies, and similar. For specific details concerning the curriculum please see §31.110.

Mathematics and Statistics Co-op

Director: Dr. Manfred E. Szabo, (514) 848-3251

The Mathematics and Statistics co-operative programme allows students to complete the BA or BSc degrees with Honours or Specialization in Mathematics, Applied Mathematics, Statistics, or Actuarial Mathematics. The academic content of the Mathematics and Statistics co-op programmes is identical to the regular programmes.

Work terms provide co-op students with the opportunity to gain practical experience with a variety of employers, such as insurance companies, consulting firms, large Canadian corporations, government departments, and research establishments. For specific details concerning the curriculum please see §31.200.

Physics Co-op

Director: Dr. David Cheeke, (514) 848-3292

The Physics co-operative programme is available to students in the BSc Honours and Specialization in Physics. The academic content is very similar to the regular programmes, with some specific recommendations for courses to improve the student's job skills. Students must be prepared to work in all parts of Canada. For specific details concerning the curriculum please see §31.230.

Co-op programmes offered in the **Faculty of Commerce and Administration**:

Accountancy Co-op

Director: Sandra M. Robinson, (514) 848-2748

The Accountancy co-operative programme is available to students who are enrolled in the BComm programme and are majoring in Accountancy. The academic content is very similar to that of the regular programmes, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.40.

Finance Co-op

Director: Arshad Ahmad, (514) 848-2928

The Finance co-operative programme is available to students who are enrolled in the BComm programme and are majoring in Finance. The academic content is very similar to that of the regular programmes, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. Most of the positions will be in the Montréal area, however, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.70.

Human Resource Management Co-op

Director: Barbara Shapiro, (514) 848-2780

The Human Resource Management co-operative programme is available to students who are enrolled in the BComm programme and are majoring in Human Resource Management. The academic content is very similar to that of the regular programmes, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.90.

Management Information Systems Co-op

Director: Dr. Meral Büyükkurt, (514) 848-2741

The Management Information Systems co-operative programme is available to students who are enrolled in the BComm programme and are majoring in Management Information Systems. The academic content is very similar to that of the regular programmes, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.40.

Marketing Co-op

Director: Harold J. Simpkin, (514) 848-2955

The Marketing co-operative programme is available to students who are enrolled in the BComm programme and are majoring in Marketing. The academic content is very similar to that of the regular programmes, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. The programme is new and while it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.100.

Co-op programmes offered in the Faculty of Engineering and Computer Science:

Building and Civil Engineering Co-op

Director: Dr. Radu G. Zmeureanu, (514) 848-3203

The Building and Civil Engineering programmes are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op programme is identical to the regular programme but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.50 for specific information on programme and performance requirements.

Electrical and Computer Engineering Co-op

Director: Dr. Christopher W. Trueman, (514) 848-3094

The Electrical and Computer Engineering programmes are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op programme is identical to the regular programme but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.50 for specific information on programme and performance requirements.

Mechanical and Industrial Engineering Co-op

Director: Dr. Gerard J. Gouw, (514) 848-4197

The Mechanical and Industrial Engineering programmes are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op programme is identical to the regular programme but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.40 for specific information on programme and performance requirements.

Software Engineering Co-op

Director: Dr. Rajagopalan Jayakumar, (514) 848-3011

Commencing in September 1998, the Computer Science Department offers a co-operative programme in Software Engineering. This is a four-year programme which will lead to professional engineering

qualifications in Software Engineering. The academic content is a mix of Computer Science and Engineering courses and is similar to that of the regular programmes. For further details please see §71.70.

Computer Science Co-op

Director: Dr. Rajagopalan Jayakumar, (514) 848-3011

All options in the Computer Science programme are offered in the co-op format to selected students enrolled in the BCompSc programme. Co-op students in Computer Science take the regular academic programme; however, they have the opportunity through the Work terms to experience computer science in the government and corporate sectors. As students near the end of their studies, they are able to choose placements directly related to their option, i.e. information systems, software systems, or systems architecture. Please refer to §71.10.8 and 71.70 for specific information on programme and performance requirements.

CO-OP SCHEDULE

Activity **flow-chart** for students undertaking their programmes in the co-op format except for the Engineering and the French Translation Co-ops:

YEAR	FALL SeptDec.	WINTER JanApril	SUMMER May-Aug.
1	1 st Campus Term	2 nd Campus Term	Work Term I
2	3 rd Campus Term	Work Term II	4 th Campus Term
3	Work Term III	5 th Campus Term	Work Term IV
4	6 th Campus Term		

Activity **flow-chart** for students undertaking the Engineering Co-op Programmes:

YEAR	FALL SeptDec.	WINTER JanApril	SUMMER May-Aug.
1	1 st Campus Term	2 nd Campus Term	3 rd Campus Term
2	Work Term I	4 th Campus Term	Work Term II
3	5 th Campus Term	Work Term III	Work Term IV
4	6 th Campus Term	7 th Campus Term	

NOTE 1: The above activity flow-chart is for students admitted into the co-op format in the Fall Term of the first year of their academic programme. However, students may be admitted at the start of its Winter Term, following their September entry, with special permission. All are required to register as full-time students, and they must plan their studies to give a reasonable division of the total credits required for their degree between the specified number of Campus terms. Students eligible to apply for NSERC grants should note that they must take at least 15 credits per term to be considered. NOTE 2: The Work Term negotiated with the employer is for a minimum of fourteen weeks. Extension beyond this period, to a maximum of seventeen weeks, is at the sole discretion of the employer. To complete the requirements of each Work Term, a student's work-term report must be assessed as "pass" in accordance with the procedure specified under "Co-op Performance Requirements".

CONTACTS AT THE INSTITUTE

Principal Prof. Graham Martin (514) 848-3951

Vice Principal and Coordinator for Chemistry and Biochemistry and Physics Co-op programmes Mr. John Fiset (514) 848-3952

Coordinators Ms. Eve Pankovitch Engineering Co-op programmes (514) 848-3953

Mr. Craig Brown Computer Science, Management Information Systems, and Software Engineering Co-op programmes (514) 848-3978 Ms. Louise Lalonde Accountancy and Marketing Co-op programmes (514) 848-3954

Ms. Allison Leblovic Economics, Finance, and Human Resource Management Co-op programmes (514) 848-3944

Ms. Brigitte St. Laurent-Taddeo Mathematics and Statistics, and French Translation Co-op programmes (514) 848-3958

Co-op Programme Administrator Ms. Lynn Bergeron (514) 848-3975

CONVOCATION MEDALS AND PRIZES

25.1	GOVERN	NOR GENERAL'S AWARD		
25.2	UNIVERS	UNIVERSITY AWARDS		
25.3	FACULT 25.3.1 25.3.2 25.3.3 25.3.4	Y AWARDS Faculty of Arts and Science Faculty of Commerce and Administration Faculty of Engineering and Computer Science Faculty of Fine Arts		
25.4	SPECIAL	L AWARDS		

CONVOCATION MEDALS AND PRIZES

25.1 **GOVERNOR GENERAL'S AWARD**

The Governor General's Silver Medal: Presented by her Excellency, the Governor General of Canada, and awarded to the highest ranking undergraduate student graduating from Concordia University.

25.2 **UNIVERSITY AWARDS**

The Birks Medal: Presented by Henry Birks & Sons (Montréal) Ltd., and awarded to the highest ranking student graduating with a BA degree.

The Anne Stokes Medal: Awarded to the highest ranking student graduating with a BEd degree in Teaching of English as a Second Language.

The Mappin Medal: Presented by the Mappin Family, and awarded to the highest ranking student graduating with a BSc degree.

The Administration Medal: Awarded to the highest ranking student graduating with a BAdmin degree.

The Charles E. Frosst Medal: Presented by Merck-Frosst Canada Inc., and awarded to the highest ranking student graduating with a BComm degree.

The Computer Science Medal: Awarded to the highest ranking student graduating with a BCompSc degree.

The Chait Medal: Awarded to the highest ranking student graduating with a BEng degree.

The Alfred Pinsky Medal: Awarded to the most outstanding student graduating with a BFA degree.

25.3 **FACULTY AWARDS**

The prizes listed in this section are awarded to the most outstanding graduating student in a department (or unit). Candidates are nominated by the departments or units for consideration and approved by the appropriate Faculty Council and Senate. The departments or units in making their selection may include, in addition to a high grade point average, other criteria such as number and/or level of the courses taken, outstanding results on a project or essay, or a significant contribution to the extra-curricular life of the department.

25.3.1 Faculty of Arts and Science

The Robert C. Rae Book Prize in Human Relations

The Biology Prize

The Chemistry Prize

The Classics Book Prize

The John E. O'Brien, s.j. Medal for Communication Studies

The Economics Prize

The Education Book Prize

The Prize for English

Le prix Paul d'Hollander pour les Études françaises

The Exercise Science Plaque

The Bogdan Zaborski Medal in Geography

The André Deland Medal for Geology

The Martin Lewis Memorial Book Prize in History

The Interdisciplinary Studies Medal

The Gordon Fisher Prize for Journalism

The Leisure Sciences Medal

The Liberal Arts College Prize

The Library Studies Plaque

The Lonergan University College Prize

The Eric O'Connor Mathematics Medal

The Modern Languages and Linguistics Plaque

The W.R. Fraser Medal for Philosophy The Walter Raudorf Medal for Physics The Renée Vautelet Prize for Political Science The J.W. Bridges Medal for Psychology

The Boyd Sinyard Prize for Religion

The Vince Sirois Prize (School of Community and Public Affairs)

The Science College Prize

The Everett C. Hughes Medal for Sociology and Anthropology

The Theological Studies Medal

The Thérèse F. Casgrain Medal for Women's Studies

The Ross Medal for Accountancy 25.3.2

Faculty of Commerce

The Decision Sciences and Management Information Systems Medal

The Finance Medal

and Administration The International Business Medal

The Management Medal The Marketing Medal

The Building Engineering Medal

25.3.3 The Matthew Douglass Medal for Civil Engineering

Faculty of The Computer Engineering Medal

Engineering and The Phoivos Ziogas Medal for Electrical Engineering The Jaan Saber Medal for Industrial Engineering Computer Science

The Mechanical Engineering Medal

The Art Education Prize 25.3.4

The Art History Prize Faculty of Fine Arts

The Cinema Prize The Contemporary Dance Prize

The Design Art Prize

The Interdisciplinary Studies Prize The Mel Hoppenheim Prize

The Music Prize

The Painting and Drawing Prize

The Print Media and Photography Prize The Sculpture, Ceramics and Fibres Prize

The Studio Art Prize The Theatre Prize

25.4 Special Awards (Awards are made only when merited)

The Concordia Medal: Presented by the Concordia University Alumni Association to an undergraduate graduating student who has displayed distinctive leadership ability through both academic and non-academic achievements and has won the outstanding commendation of his/her fellows and of the faculty.

The First Graduating Class Award: Presented on behalf of the first graduating class of the Faculty of Arts, Science and Commerce of Sir George Williams College, known as the Guinea Pig Club, for the most innovative and new contribution either academic or extra-curricular to University life.

The Malone Medal: Presented in honour of Rev. Patrick G. Malone, s.j., and awarded to the undergraduate graduating student whose efforts and dedication best exemplify the values of the University within the internal Concordia community.

The O'Brien Medal: Presented in honour of Dr. J.W. O'Brien and awarded to the undergraduate graduating student whose efforts and dedication best exemplify the values of the University within the larger external community.

FACULTY OF ARTS AND SCIENCE

31.001	FACULTY OF ARTS AND SCIENCE
31.002	PROGRAMMES AND ADMISSION REQUIREMENTS
31.003	DEGREE REQUIREMENTS
	ADULT EDUCATION (See 31.090.1)
31.010	APPLIED HUMAN SCIENCES
31.030	BIOLOGY
31.050	CHEMISTRY AND BIOCHEMISTRY
31.060	CLASSICS, MODERN LANGUAGES AND LINGUISTICS
31.070	COMMUNICATION STUDIES
31.080	ECONOMICS
31.090	EDUCATION
31.100	ENGLISH
	ENGLISH AS A SECOND LANGUAGE (See 31.320)
31.110	ÉTUDES FRANÇAISES
31.120	EXERCISE SCIENCE
31.130	GEOGRAPHY
31.140	GEOLOGY
31.160	HISTORY
	INFORMATION STUDIES (See 31.090)
	INTERDISCIPLINARY CLUSTERS (See 31.070)
31.170	INTERDISCIPLINARY STUDIES
31.180	JOURNALISM
	LEISURE SCIENCES (See 31.010)
31.190	
31.200	MATHEMATICS AND STATISTICS
31.220	PHILOSOPHY
31.230	PHYSICS
31.240	POLITICAL SCIENCE
31.250	PSYCHOLOGY
31.270	RELIGION
31.300	SCIENCE AND HUMAN AFFAIRS
31.310	SOCIOLOGY AND ANTHROPOLOGY
	SOUTHERN ASIA STUDIES (See 31.170)
31.320	TEACHING OF ENGLISH AS A SECOND LANGUAGE
31.330	THEOLOGICAL STUDIES
31.340	URBAN STUDIES
	WOMEN'S STUDIES (See 31.560)
31.400	COMPUTER SCIENCÈ (Minor)
31.500	COLLEGES, INSTITUTES AND SCHOOLS
31.515	CO-OPERATIVE EDUCATION
31.520	LIBERAL ARTS COLLEGE
31.530	LONERGAN UNIVERSITY COLLEGE
31.540	SCHOOL OF COMMUNITY AND PUBLIC AFFAIRS
31.550	SCIENCE COLLEGE
31.560	SIMONE DE BEAUVOIR INSTITUTE and WOMEN'S STUDIES

31.001 FACULTY OF ARTS AND SCIENCE

MARTIN SINGER

Vice-Dean. Academic ROBERT M. ROY

Vice-Dean, Administrative Affairs WILLIAM KNITTER

Vice-Dean, Curriculum and Appraisals **DENNIS MURPHY**

Vice-Dean. Student Affairs FRANCES SHAVER

Location

Loyola Campus

Administration Building, Room: AD 229

(514) 848-2080

Sir George Williams Campus Library Building, Room: LB 689

(514) 848-2101

Structure

The Faculty of Arts and Science, comprised of the former Loyola Faculty of Arts and Science, the former Sir George Williams Faculty of Arts, and the former Sir George Williams Faculty of Science, was brought into being on July 1, 1977.

For administrative purposes, the Faculty consists of departments, programmes, Centres, Colleges, Institutes, and Schools.

The Departments and other units of which the Faculty is comprised are as follows:

Departments

Applied Human Sciences

Biology

Chemistry and Biochemistry

Classics, Modern Languages and Linguistics

Communication Studies

Economics Education **English**

Études françaises Exercise Science Geography History Journalism

Mathematics and Statistics

Philosophy **Physics** Political Science Psychology Religion

Sociology and Anthropology

Theological Studies

Centre

Teaching of English as a Second Language

Colleges

Liberal Arts College Lonergan University College

School of Community and Public Affairs

Science College

Simone de Beauvoir Institute

Programmes

Geology

Individually Structured Programme

Information Studies Science and Human Affairs Southern Asia Studies **Urban Studies** Women's Studies

Objectives

The Faculty of Arts and Science is committed to responsible and innovative leadership in developing and disseminating knowledge and values and encouraging constructive social criticism. The Faculty achieves these objectives through inclusive and accessible academic programmes which stress a broad-based, interdisciplinary approach to learning. We are dedicated to superior teaching and research supported by excellence in scholarship and creative activity, and a tradition of service to the community. The Faculty of Arts and Science serves many interdependent academic communities in an urban environment where students and faculty can pursue their shared commitment to lifelong learning.

General Studies in Arts and Science

The Faculty of Arts and Science encourages all students to explore beyond the boundaries of their programmes of concentration. This is facilitated by the programme structure and graduation requirements of the undergraduate degrees (see §31.002 and 31.003).

Undergraduate degrees normally require 90 credits of course work, consisting of at least one programme of concentration (Major, at 36 to 48 credits; Specialization or Honours, at 60 or more credits). The balance of the degree requirements may be made up of one or more Minors (24 to 30 credits), one or more clusters (15 or 18 credits), or by courses selected from a broad spectrum of disciplines. Students are required to complete at least 24 credits outside the main area of concentration.

Most Major programmes are relatively short, allowing maximal development of interests outside the area of concentration. Two areas of concentration can be combined in a Double Major. Even longer programmes (Specialization and Honours) allow students to diversify their studies for up to one third of their degree requirements.

Programme structures thus permit students to obtain a judicious balance between concentrated study and exploration of broader interests. Department and Faculty advisers are available to help students develop a plan of study which accommodates their personal interests and satisfies degree requirements.

Programmes of concentration and related Minors are published in the Calendar entries for each of the disciplines in the Faculty (§31.010 onward). To facilitate innovative exploration outside these standard disciplines, the Faculty offers many alternatives. First, the University has established five Colleges (§31.500 onward) which foster various philosophies and methods of education on an intimate scale. Second, it has created Majors which cross disciplinary boundaries (Science and Human Affairs, Southern Asia Studies, Urban Studies, and Women's Studies). In addition, selected students may create their own Individually Structured Programme (§31.170) under the direction of the Faculty adviser. Finally, the Faculty offers cross-disciplinary Minors (for example, Science and Human Affairs, Southern Asia Studies, Urban Studies, and Women's Studies) and a number of Interdisciplinary courses (§31.170) which may be chosen as electives in any programme.

A good general education — balancing the development of expert knowledge in a narrow domain with broader academic experience — can be obtained in the Faculty of Arts and Science. The programmes outlined are best considered as models of what can be planned by imaginative students and their academic advisers.

31.002 PROGRAMMES AND ADMISSION REQUIREMENTS

General admission requirements are listed in §13.

Specific requirements for admission to the various programmes leading to the BA, BEd, and BSc degrees, and to Certificates, are set out in the first column of the following listings. They refer to the table of cégep pre-Arts and pre-Science profiles defined below. Students lacking one or more of these prerequisites may be admitted, but must include the designated prerequisites among the first 30 credits of their undergraduate programme. In certain cases, the prerequisites must be taken in addition to the undergraduate programme.

Profile	Requirements
rionie	Requirements
0.00	Diploma of Collegial Studies (DEC $-$ Diplôme d'études collégiales)
0.72	DEC or equivalent and appropriate teaching licence.
0.80	Full-time teaching position with an educational institution recognized by the Ministry of Education of Québec (MEQ) and a Provisional Teaching Authorization from the MEQ.
3.14	Biology 301, 401, 911 or 921
4.03	New Social Science DEC Mathematics 300 Biology 921
4.10	DEC in Humanities or equivalent. Any other DEC including courses in Psychology and Quantitative Methods or its equivalent.
5.00	Natural Science DEC
6.00	DEC intégré en sciences, lettres et arts
10.1	Mathematics 337; or 103, 307 Biology 301 or 401 or 911 or 921 Psychology 101 or 102
10.5	Two cégep courses or equivalent in the language to be studied. If these courses have not been available in the cégep attended, the student may be required to complete them at the university-level.

- 10.9 Mathematics 103, 203 Physics 101, 201, 301 Chemistry 101, 201 Biology 301
 10.10 Mathematics 103, 203, 105 Physics 101, 201, 301 Chemistry 101, 201 Biology 301
 10.12 Mathematics 103, 105, 203
- 10.13 There are no particular requirements for graduates of an anglophone cégep other than the DEC. Graduates of a francophone cégep must hold a DEC with a course in English of the 900 series or have an equivalent background in English.
 - A: Interview
 - G: Letter of intent
 - K: Submission of a portfolio of representative work
 - N: Placement test
 - P: Competency in written and oral French, to be determined by a proficiency test, the results of which may lead to the rejection of the candidate or the requirement of additional university courses.
 - Q: Competency in written and oral English, to be determined by a proficiency test, the results of which may lead to the rejection of the candidate or the requirement of additional university courses.
 - +: Two letters of reference

Programme titles refer to Honours, Specialization and Major components where these exist. Full information about the programmes offered under each title (including combinations with programmes in other disciplines) is to be found in the section of the Calendar specified in the third column below.

BA, BSc, BEd

Profile	Programme	Calendar Section
0.00A ^{Cert. only}	Adult Education	31.090.1
0.00	Anthropology	31.310
0.00	Anthropology and Sociology	31.310
0.00G,+	Applied Human Relations	31.010
10.9/5.00/6.00	Biochemistry	31.050
10.9/5.00/6.00	Biology	31.030
	Cell and Molecular Biology (see Biology)	
10.9/5.00/6.00	Chemistry	31.050
0.00	Child Studies	31.090
0.00	Classical Civilization	
0.00	Classical Language and Literature	31.060
0.00A,G,K,+	Communication Studies	31.070
0.00A,G,+	Communication and Cultural Studies	31.070
0.00A,G,K,Q,+	Communication and Journalism	31.070, 31.180
0.00	Community and Ethnic Studies	31.310
0.00A,+	Community Service	31.010
0.00G,K	Creative Writing (see English and Creative Writing)	31.100
0.00A+	Early Childhood and Elementary Education	31.090
	Ecology (see Biology)	
0.00	Economics	31.080
0.00	Education	31.090
0.80	Education (Certificate)	31.090
0.00	Education: Adult Education	31.090.1
	Education (see Child Studies; Early Childhood and	
	Elementary Education; Teaching of English as a Second	
0.00	English	31.100
0.00G,K	English: Creative Writing	31.100
0.00G,K	English and Creative Writing	31.100
0.00	English and History	31.100, 31.160
0.00	English Literature	31.100

Profile	Programme	Calendar Section
	Études françaises	
0.00	Études françaises	31.110
0.00	Langue française	31.110
10.5	Littératures de langue française	31.110
10.5	Traduction (Major)	31.110
10.5G	Traduction (Specialization)	31.110
10.9/5.00/6.00	Exercise Science	31.120
10.9/5.00/6.00	Exercise Science	31.120
	(Clinical Exercise Physiology, Athletic Therapy)	
0.00A,+	Family Life Education	31.010
0.00	French Studies — see Études françaises	24.420
0.00	Geography (BSs), Human Environment	31.130
10.9/5.00/6.00 10.9/5.00/6.00	Geography (BSc), Environmental Geography	31.130 31.140
10.5/6.00	Geology German	31.060
10.5/0.00	Greek (Classical Language and Literature)	31.000
0.00	History	31.160
0.00	Southern Asia Studies	31.160
0.00	History and English	31.160, 31.100
0.00	Information Studies	31.090
Appropriate	Interdisciplinary Studies —	31.170
Appropriate	Individually Structured Programme	31.170
10.5/6.00	Italian	31.060
0.00A,G,Q	Journalism	31.180
0.00	Judaic Studies	31.270
	Latin (see Classics)	
10.1	Leisure Sciences	31.010
0.00	Linguistics	31.060
0.00	Lonergan Interdisciplinary Studies	31.530
10.12/6.00	Mathematics and Statistics (BA)	31.200
10.10/5.00/6.00	Mathematics and Statistics (BSc)	31.200
10.12/6.00	Mathematics (Actuarial — BA)	31.200
10.10/5.00/6.00	Mathematics (Actuarial — BSc)	31.200
10.12/6.00	Mathematics (Pure and Applied — BA)	31.200
10.10/5.00/6.00	Mathematics (Pure and Applied — BSc)	31.200
0.00A,G	Pastoral Caregiving (Cert. only)	31.330
0.00	Philosophy	31.220
10.10/5.00/6.00	Physics	31.230
10.10/5.00/6.00	Physics/Marketing	31.230
0.00	Political Science	31.240
10.1/4.03/6.00	Psychology (BA)	31.250
or 3.14/4.10 or 4.03	Developed (POs)	04.050
5.00/6.00/10.1/10.9		31.250
	Psychology (Behavioural Neuroscience Option)	31.250
0.00	Religion Religion — Judaic Studies (see Judaic Studies)	31.270
0.00	Science and Human Affairs	24 200
0.00 0.00	Sociology	31.300 31.310
10.5/6.00	Spanish	31.060
10.12/6.00	Statistics (BA)	31.200
10.10/5.00/6.00	Statistics (BSc)	31.200
10.13	Teaching of English as a Second Language	01.200
A,G,P,Q,+	readiling of English as a occord Eanguage	31.320
0.72	Teaching of English as a Second Language	5 5
A,G,P,Q,+	(Certificate)	31.320
0.00	Theological Studies	
A,G	(Certificate)	31.330
10.1	Therapeutic Recreation	31.010
0.00	Urban Studies	31.340
0.00A	Western Society and Culture	31.520
0.00	Women's Studies	31.560

Mature Student Entry

Concordia University has a tradition of concern for the education of Mature students: it has always sought to assist students of 21 and over to undertake undergraduate studies.

The primary aim of the Centre for Mature Students is to develop services to students returning to formal studies after an absence of many years. It is difficult to plunge suddenly into a very large urban University after years away from classes and studying; therefore, the Fellows and staff of the Centre hope to reach out to all Mature Entry students to offer them encouragement and guidance. The Centre has quarters on both campuses that function as a "home base" for students who want counselling or are simply in need of some social contact with their peers (see §14).

Extended Credit Programme

Students admitted to BA and BEd Extended Credit Programmes are required to complete an additional 30 credits for the degree and must include the following 30 credits:

30 elective credits, of which a maximum of 12 may be outside the Faculty of Arts and Science. Certain departments in the Faculty have specific requirements. Students intending to follow programmes of concentration within these departments must include the specified components as part of their programme.

BA Leisure Sciences and Therapeutic Recreation: SOCI 2123; BIOL 2006* or 2013; PSYC 2006 *Students in the Therapeutic Recreation programme must choose BIOL 2006.

BA Mathematics: 9 credits in Mathematics — 203³, 204³, 205^{3*}

*Students not having MATH 2023, or the equivalent, must take it in place of one of their elective courses.

BA Psychology: 3 credits in Mathematics

3 credits in Biology 6 credits in Psychology

Students admitted to the BSc Extended Credit Programme are required to complete an additional 30 credits for the BSc degree and must include the following 30 credits:

- 6 credits in Chemistry 2053, 2063
- 6 credits in Mathematics 203³, 205³* 12 credits in Physics 204³, 205³, 206³, 224¹, 225¹, 226¹
- 3 credits in Biology 201³
- 3 credits in Mathematics 2043 for students intending to enter programmes of concentration in Mathematics or Physics;** or electives for all other students
- *Students not having MATH 2013, or the equivalent, must take it in place of one of their elective courses.
- **Students not having MATH 2023, or the equivalent, must take it in place of one of their elective courses.

NOTE: Students in the BA, BEd or BSc Extended Credit Programme may not count towards their programmes of concentration courses taken as part of the first 30 credits.

31.003 DEGREE REQUIREMENTS

In accordance with the recommendations of the Council of Universities of Québec, the credit base takes into account the total activity of the student. A student preparing for the BA, BEd, or BSc degree takes a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours spread across lectures, conferences, tutorials, laboratories, studio or practice periods, tests, examinations, and personal work.

Since the cégep programmes are designed to give all students the opportunity to explore different fields and thus acquire a broad general basis for further study, the undergraduate programmes in the Faculty of Arts and Science require some degree of concentration in specific areas. Detailed statements about these programmes are made under the appropriate disciplinary headings in the sections of the Calendar that follow this general account of degree requirements. They represent four main forms of concentration: the Minor, the Major, the Specialization, and Honours; and a fifth form, the Certificate. The University's formal definitions of these kinds of programmes are set out in §16.2.3; for the convenience of students in Arts and Science, those definitions as they are construed in the Faculty are briefly repeated below.

The *Minor* is a programme consisting of a *minimum* of 24 specified credits in a single discipline and professing to give a basic introduction to the methodology and key concepts of that discipline. A Minor cannot in and by itself provide the concentration required of a candidate for a degree and is therefore always taken in combination with another programme. In addition to the Interdisciplinary and Disciplinary Minors available in Arts and Science, students may register with approval for selected Minors in other Faculties. Available Arts and Science Interdisciplinary and Disciplinary Minors are listed in §31.170.

The Faculty of Arts and Science and the Faculty of Commerce and Administration: With the approval of the Faculty of Commerce and Administration, Arts and Science students may take a Minor in Business Studies (see §61.140).

The Faculty of Arts and Science and the Faculty of Engineering and Computer Science: With the approval of the Faculty of Engineering and Computer Science, Arts and Science students may take a Minor in Computer Science (see §71.70.5).

All Minors in the Faculty of Fine Arts are open to suitably qualified students.

The Major consists of a minimum of 36 specified credits taken in an approved sequence of courses. Normally within a major programme not more than 36 credits are required from a single discipline or department. In certain programmes, however, additional credits are required in cognate disciplines and departments. The Major provides a solid grounding in the academic knowledge comprehended within the field of concentration. To enter and remain in it, a student normally does not have to meet a special performance requirement; see, however, Western Society and Culture §31.520. Students with appropriate admission requirements, normally after completion of 24 credits, may request permission to be admitted to a second programme of concentration in the Faculty, normally a Major. Exceptionally, students may complete a second Major in the Faculty of Fine Arts with permission of both Faculties. Students may apply to add a major programme normally offered as part of a BA degree to a BSc degree or BEd degree or vice-versa. Attainment of acceptable GPA and satisfactory academic standing are required. The Faculty of Arts and Science will consider favourably such requests subject to admission quotas and the student having the appropriate prerequisite and admission profile (see §31.002). The student record and official transcript indicate all programmes of concentration. Specific courses can only be used to fulfil the requirements of one programme. Students completing the requirements of a BA, BEd, BSc, and/or BFA will elect one degree for graduation.

The *Specialization* consists of a *minimum* of 60 specified credits, normally not more than 54 credits of which are mandated from a single discipline or department. A Specialization provides a comprehensive education in the field of concentration, but to enter and remain in it, a student normally does not have to meet a special performance requirement unless otherwise indicated in the programme. Students interested in subsequent "classification" by the provincial government may be advised to follow a Specialization or an Honours programme. Second programmes of concentration (Minor or Major) may be combined with a Specialization programme according to regulations described above for those programmes.

The *Honours* programme consists of a *minimum* of 60 specified credits taken in an approved sequence of courses. Normally within an Honours programme not more than 60 credits are mandated from a single discipline or department in the Arts and 72 credits in the Sciences. Additional credits may be required in cognate disciplines and departments. Superior academic performance is required for admission to and continuation in the Honours programme, the precise level of such performance being determined by Senate. See §16.2.3 and *Faculty Honours Regulations* set out below for matters governing Honours programmes at Concordia. An Honours degree or equivalent, because it testifies to a student's comprehensive education in a particular field, intellectual commitment to that field, and achievement of a high level of academic performance, has traditionally been required of entrants to postgraduate programmes.

Graduation Requirements

- 1. A candidate for graduation must have successfully completed a programme of concentration in the form of an *Honours*, *Specialization*, or *Major* programme.
- A candidate for graduation must have successfully completed at least 24 credits outside the single discipline or department from which the degree concentration has been chosen. Within every block of 30 credits taken towards the degree, a student will normally choose no more than 24 credits from any one discipline or department.
- 3. A candidate for graduation must have successfully completed at least 18 credits from courses in Arts and Science in every block of 30 credits taken towards the degree.
- 4. A candidate for the BA degree must have qualified for admission to, and successfully completed, a programme leading to that degree. Specific admission requirements, expressed

- as cégep pre-Arts profiles, are given in §31.002. Students wishing to transfer out of one degree programme into another must satisfy the admission requirements of the programme they seek to enter
- Students enrolled in a regular degree programme or an Extended Credit degree Programme in the Faculty of Arts and Science may take ESL courses for degree credit, up to a maximum of six credits.
- 6. A candidate for the BSc degree must have qualified for admission to, and successfully completed, a programme leading to that degree. Specific admission requirements, expressed as cégep pre-Science profiles, are given in §31.002. Students wishing to transfer out of one degree programme into another must satisfy the admission requirements of the programme they seek to enter.
- A candidate for the BEd degree must have qualified for admission to, and successfully completed, the programme leading to that degree. The admission and degree requirements are set out in §31.320.
- 8. In general, the credits obtained for any course may not be used to satisfy the requirements of more than one programme. Students first registered in certain Certificate programmes may however apply credits obtained towards the Certificate to a degree programme.
- Those students entering the University after September 1, 1978 as Independent students will
 be permitted to apply no more than 30 credits obtained as an Independent student towards any
 Arts and Science Faculty degree programme.

Supplemental Examinations (Arts and Science)

Supplemental examinations shall be offered only when, as a condition for passing the course, it is required that a student pass the final examination regardless of its weighting; or where the final examination contributes 50% or more of the final grade.

A student failing a course which comprises entirely, or in part, a laboratory or similar practicum, may not be eligible to write a supplemental examination.

All courses which a student fails and for which there is no supplemental examination shall be graded "FNS" or "R".

A failed student (see §16.3.10 V) may not write supplemental examinations.

Honours Programmes

The Faculty of Arts and Science has programmes leading to an Honours degree in certain selected fields. To enter an Honours programme, students apply to the Departmental Honours Committee (adviser). The Departmental Honours Committee (adviser) will accept students into Honours, subject to review by the Faculty Honours Committee. The Departmental Honours Committee (adviser) will not normally accept students until they have obtained 30 credits at this University; students requiring fewer than 30 credits to graduate will not normally be accepted. The Department will notify the Faculty Honours Committee of the acceptance. The Faculty Honours Committee will review the departmental acceptance and notify the Department, the student, and the Office of the Registrar of the acceptance. In those cases where the Faculty Committee reverses a department's acceptance of a student into Honours, the Department may appeal the Faculty Committee's ruling to the Arts and Science Faculty Council.

NOTE: For Joint Honours Programmes, please refer to §31.170 for Interdisciplinary Studies.

Honours Regulations (Faculty Regulations) see also §16.2.3

In order to qualify for an Honours degree, a student must comply with the regulations set forth below.

- An Honours student must meet the general degree requirements, as well as the specific
 requirements for an Honours degree. A student must complete a minimum of 30 credits in the
 courses from the Honours component of the programme at this University to receive a degree
 with Honours. In certain cases, these 30 credits may include some specific courses for which
 pro-tanto credit may not be awarded.
- 2. To be admitted into an Honours programme, a student must have a minimum cumulative GPA of 3.00 ("B"). A student must maintain a minimum cumulative GPA of 3.00 as well as a minimum annual GPA of 3.00 within the Honours programme. The minimum acceptable grade in any course is a "C". Averages are calculated on Concordia courses only.
- 3. Students who are required to withdraw from the Honours programme may proceed in the corresponding Specialization or Major programme. Reinstatement in the Honours programme is possible only by appeal to the Faculty Honours Committee.
- 4. A student is allowed to qualify for only one Honours degree in either a single or combined Honours programme. A student may qualify for a Minor or Major programme in addition to an Honours programme. In general, the credits obtained for a particular course may be used to satisfy the requirements of only one programme.

Students may appeal their Department's determination of their status or interpretation of requirements in the Honours programme. Such appeals should be addressed to the Chair of the Faculty Honours Committee. The Faculty of Arts and Science has an Honours Committee made up as follows: three faculty members; one student member; two Student Affairs advisers (non-voting); one representative of the Office of the Registrar (non-voting); the Vice-Dean, Student Affairs who acts as Chair.

The Faculty Honours Committee receives and reviews departmental recommendations for acceptance into Honours programmes and graduation with Honours, and adjudicates disputes between students and departments concerning Honours programmes. Since the Faculty Honours Committee cannot hear appeals contesting its own judgements, students and departments who wish to appeal a decision of the Faculty Honours Committee should address this appeal to the Dean of the Faculty.

General Certificate in Arts and Science

The General Certificate in Arts and Science is intended primarily for part-time students who qualify for admission to undergraduate degree programmes, but who, at the time of registration, have not yet determined which programme would best serve their interests. In particular, it is designed to meet the needs of Mature students who are unwilling or unable to make the long-term commitment involved in a regular or extended degree programme. Students who have completed a university degree do not qualify for admission into the General Certificate in Arts and Science.

The Certificate requires successful completion of 30 credits. At least 24 of these credits must be chosen from courses offered by not more than three departments in the Faculty of Arts and Science. Credits earned in the Certificate may not be counted towards the additional credits required in extended programmes.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

The General Certificate programme in Arts and Science was first offered in the session commencing September 1978. Students who are admitted to the General Certificate in Arts and Science, and who wish to continue in a degree programme should apply for admission to their programme within the first 30 credits.

31.003.1

Academic

Performance

Regulations

Objectives

The objectives of these regulations are to ensure that the Faculty can certify that all of its graduates have achieved an acceptable level of scholarship.

Annual Weighted Grade Point Average (WGPA)* Requirements and Consequences *See §16.3.10 for definition of Annual WGPA.

Acceptable standing requires that a student obtain an Annual WGPA of at least 2.00. NOTE: Although a "C-" grade (1.70 grade points) is designated as satisfactory in §16.3.3, a WGPA of 2.00 is required for acceptable standing.

Students in acceptable standing may continue their programmes of study, following the advice of their academic departments.

Conditional standing results when a student obtains an Annual WGPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments. Students in conditional standing may not write supplemental examinations.

Students in conditional standing will not be permitted to register for further study until their programme has been approved by the appropriate adviser in their department.

They must obtain acceptable standing at the time of their next assessment.

Failed standing results when a student obtains an Annual WGPA of less than 1.50, or conditional standing in two consecutive periods of assessment.

Failed students may not write Supplemental examinations.

Failed students are required to withdraw from their programme. Students who are in failed standing for a second time will be dismissed from the University. In subsequent years, should they wish to return to University studies, they must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

Failed students who are not dismissed may apply for readmission through the Dean's Office of the Faculty to which they wish to be readmitted. If readmitted, they will be placed on academic probation. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.

Graduation Requirements

Students must satisfy all course requirements and be in acceptable standing.

The standings of potential graduates who have attempted less than 12 credits since their last assessment are determined on the basis that these credits constitute an extension of the last assessment period.

Potential graduates who fail to meet the requirements of acceptable standing, but meet the requirements of conditional standing, will have the following options:

- a) register for an additional 12 credits and, at the next assessment, meet the requirements for acceptable standing;
- register for fewer than 12 additional credits.

In this case, standing will be determined on the basis that these extra credits constitute an extension of the last assessment period.

For both option a) and option b), the additional courses taken must be approved by the appropriate member of the Dean's Office, in consultation with the student's department where necessary.

Dean's Office

Dean's Office is to be understood as being the appropriate member of the Dean's Office, normally the Vice-Dean, Student Affairs, or delegate.

31.010

APPLIED HUMAN SCIENCES

Faculty

Chair RANDY B. SWEDBURG, Associate Professor

Professor Emeritus
RICHARD D. McDONALD

Professor and Graduate Programme Director JAMES F. GAVIN

Professor MARILYN TAYLOR

Associate Professors GHISLAINE GUÉRARD RAYE KASS BLUMA LITNER VARDA MANN-FEDER LISA OSTIGUY Assistant Professors DON DE GUERRE MARTHA THOMAS

Associate Professor of Applied Human Sciences and Psychology DOROTHY MARKIEWICZ

Lecturer ROBERT HOPP

Adjunct Professors RICHARD CAWLEY JAMES KASS

Location

Loyola Campus 7141 Sherbrooke St. W., Room: HB 131 (514) 848-3330 Sir George Williams Campus Annex F, Room: 104 (514) 848-2260

Department Objectives

The strategic objective of the Department of Applied Human Sciences is to improve quality of life and well-being. This is accomplished through the integration of theory and practice to promote effective practitioner skill. The Department of Applied Human Sciences is an interdisciplinary and applied academic unit which generates knowledge and provides practice-based education in human relations, leisure sciences, therapeutic recreation, human systems intervention, family life education and community service. Involvement in practical contexts beyond the University provides an important link with members of the community, thereby offering a genuine environment for the exchange of knowledge and expertise.

Programmes

Students in Leisure Sciences and Therapeutic Recreation are required to complete the appropriate entrance profile (10.1) for entry into the programmes.

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

60 BA Specialization in Human Relations

NOTE: INTE 296 or equivalent is a prerequisite for this programme.

- 15 AHSC 220³, 230³, 232³, 260³, 270³
- 21 AHSC 330⁶, 351⁶, 370³, 380³, 382³
- 6 AHSC 439⁶
- 6 Chosen from AHSC 420⁶, 440⁶
- 12 Elective credits chosen from AHSC 225³, 245³, 253³, 254³, 256³, 314³, 316³, 319³, 323³, 333³, 335³, 371³, 375³, 422³, 444³, 460⁶, 470³

60 BA Specialization in Leisure Sciences

- 12 AHSC 220³, 230³, 241³, 260³
- 15 AHSC 350³, 361³, 371³, 380³, 382³
- 12 AHSC 427³, 431³, 437⁶
- 9 HIST 215³; PHIL 255³; and either PSYC 286³ or SOCI 244³
- 12 Chosen from Recreation Programming or Recreation Administration

Recreation Programming AHSC 281³, 310³, 314³, 316³, 319³, 323³, 333³, 340³, 360³, 421³, 422³, 444³, 450³, 460⁶, 490³, 491³

Recreation Administration

COMM 217³, 222³, 305³, 308³; ECON 201³, 203³; MANA 266³; MARK 213³

BA Specialization in Therapeutic Recreation

- 15 AHSC 220³, 230³, 241³, 260³, 281³
- 21 AHSC 350³, 361³, 380³, 381³, 382³, 383³, 384³
- 9 AHSC 427³, 432³, 450³
- 9 AHSC 438⁹
- 6 HIST 2153; PHIL 2553

42 BA Major in Human Relations

- 15 AHSC 220³, 230³, 232³, 260³, 270³
- 12 AHSC 330⁶, 351⁶
- 3 AHSC 435³
- 12 Elective credits chosen from AHSC 225³, 245³, 253³, 254³, 256³, 314³, 316³, 319³, 323³, 333³, 335³, 371³, 375³, 420⁶, 422³, 440⁶, 444³, 460⁶, 470³

42 BA Major in Leisure Sciences

- 24 AHSC 220³, 230³, 241³, 260³, 350³, 361³, 371³, 427³
- 9 HIST 215³; PHIL 255³; and either PSYC 286³ or SOCI 244³
- 9 Chosen from AHSC 310³, 314³, 316³, 319³, 323³, 333³, 340³, 360³, 421³, 422³, 444³, 450, 3460⁶

30 Minor in Human Relations

- 12 AHSC 220³, 230³, 232³, 260³
- 6 AHSC 330⁶
- 12 Elective credits chosen from AHSC 225³, 245³, 253³, 254³, 256³, 270³, 314³, 316³, 319³, 323³, 333³, 335³, 371³, 375³, 422³, 444³, 460°, 470³

Certificate in Community Service

The Department of Applied Human Sciences offers a 30-credit programme leading to the Concordia University Certificate in Community Service. Students may transfer into the Certificate programme up to 12 credits earned in an incomplete degree or Certificate programme or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Admission Requirements

General admission requirements are listed in §13.

Students are required to complete the 0.00A,+ entrance profile to enter the Certificate. Students should be actively involved in community service, either as staff or as volunteers or members of boards, committees, or councils of community organizations and agencies. Mature entry students require additional prerequisite: ENGL 212³.

30 Certificate in Community Service

NOTE: AHSC 230³, 232³, and 270³ are prerequisites for courses included in this Certificate.

Phase I

9 AHSC 256³, 260³, 370³

Phase II

6 AHSC 330⁶

Phase III

- 6 Chosen from AHSC 420⁶, 440⁶, 460⁶
- 9 Elective credits chosen from AHSC 220³, 225³, 245³, 314³, 316³, 319³, 333³, 335³, 371³, 375³, 422³, 444³

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the programme, chosen in consultation with the Coordinator of Undergraduate Programmes.

Certificate in Family Life Education

The Department of Applied Human Sciences offers a 30-credit programme leading to the Concordia University Certificate in Family Life Education. Students may transfer into the Certificate programme up to 12 credits earned in an incomplete degree or Certificate programme or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Admission Requirements

General admission requirements are listed in §13.

Students are required to complete the 0.00A,+ entrance profile to enter the Certificate.

Students should be actively involved in family life education through a sponsoring community agency or organization; or interested in becoming more effective family life educators.

Mature entry students require additional prerequisite: ENGL 212³.

30 Certificate in Family Life Education

NOTE: AHSC 220³, 230³, and 232³ are prerequisites for courses included in this Certificate.

Phase I

9 AHSC 254³, 260³, 355³

- Phase II
- 6 AHSC 330⁶
 - Phase III
- 3 AHSC 435³
- 12 Elective credits chosen from AHSC 225³, 245³, 253³, 256³, 270³, 314³, 316³, 319³, 323³, 335³, 444³, 460⁶

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the programme, chosen in consultation with the Coordinator of Undergraduate Programmes.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

AHSC 220 Life Span Growth and Development for Practitioners (3 credits)

This course provides a theoretical overview of the developmental patterns and typical challenges in each stage of human life from birth to death. Students learn about normative changes in the context of historical and cultural influences in relation to identity-related differences. The course focuses on typical age-related concerns and intervention-related issues.

AHSC 225 Self-Managed Learning (3 credits)

This course fosters effectiveness in orienting and directing learning which is precipitated by new personal interests and goals and/or by changing personal circumstances. It enables students to create clear personal visions, set relevant learning goals, create and organize related activities, and assess their progress. The course provides learning process models and ways to identify personal stylistic differences which affect personal learning progress and strategies.

NOTE: Students who have received credit for APSS 415 may not take this course for credit.

AHSC 230 Interpersonal Communication and Relationships (3 credits)

This course is designed to provide knowledge and skill in building and maintaining interpersonal relationships characterized by mutual understanding and respect. Students can expect to enhance their understanding of effective communication behaviour and to improve their abilities to attend to verbal and non-verbal communication from others, exchange constructive feedback with others, engage in effective problem-solving, address and deal constructively with conflict, and communicate across differences, such as gender and race. Conceptual perspectives feature attention to contextual influences in relationship dynamics and the role of affect in interpersonal communication. The course also examines ethical and value considerations. NOTE: Students who have received credit for

AHSC 232 Working in Task Groups (3 credits)

Prerequisite: AHSC 230 and, for students in AHSC programmes, must be taken in the com-

APSS 240 may not take this course for credit.

plementary section and in the same academic year. This course is an introduction to understanding interaction and developmental processes of small groups and skill-building for effective participation. It enables students to learn observational frameworks, process observation, collaborative problem-solving and decision-making, and facilitative member roles. It provides opportunities to learn to draw relationships between observations and conceptualizations which highlight developmental stages, contextual and structural influences (such as minority-majority relations), and personal style differences. NOTE: Students who have received credit for APSS 240 may not take this course for credit.

AHSC 241 Recreation and Leisure in Contemporary Society (3 credits)

This course introduces students to the theories and relationships of play, perceptions of free and discretionary time, concepts of leisure, and the historical foundations for the discipline. The concepts are presented as integral components of today's lifestyle. In addition, the organized recreation system is examined, with an introduction to the leisure services delivery system. The students also examine the role that leisure plays in current societal issues.

NOTE: Students who have received credits for LESR 241 may not take this course for credit.

AHSC 245 Respecting Diversity in Human Relations (3 credits)

Prerequisite: AHSC 230 or permission of the Department. This course examines the significance of identity-related differences, such as disability, age, gender, race, ethnicity, sexual orientation, in human relationships and social settings. Students can expect to learn about the nature and effects of negative stereotyping and biases in personal perspectives, institutional practices, and cultural norms. It fosters the development of awareness and skill in communicating and relating across these differences. NOTE: Students who have received credit for APSS 399E may not take this course for credit.

AHSC 253 Sexuality in Human Relations (3 credits)

Prerequisite: AHSC 230 or permission of the Department. This course provides students with

knowledge of physical and psychosocial aspects of sexuality in relationships through life and examines values, attitudes, and issues related to the development and expression of sexuality. Topics include gender, family, cultural and media influences; historically and culturally based attitudes; prevention and sexually transmitted diseases; self-perception and identity in sexuality; and emotion and sexuality. The course aims to foster respect for persons and diversity. NOTE: Students who have received credit for APSS 353 may not take this course for credit.

AHSC 254 Family Communication (3 credits)

Prerequisite: AHSC 220. This course is a requirement for students enrolled in the Certificate in Family Life Education. This course is an examination of patterns, effective approaches, and issues in communication among persons in primary partnerships and families. It also explores topics such as diversity in forms of "family", decision-making, problem-solving, power relations, gender issues, managing differences in expectations, and the influences of cultural, social, and economic contexts. NOTE: Students who have received credit for APSS 354 may not take this course for credit.

AHSC 256 Interviewing (3 credits)

This course reviews different forms and concepts relevant to interviewing for use in work and community settings. It examines communication influences on the interviewer and interviewee and the limitations of different interview approaches. It enables students to structure and design interviews, to build rapport, and to manage information flow.

NOTE: Students who have received credit for APSS 356 may not take this course for credit.

AHSC 260 Programme Planning, Design and Evaluation (3 credits)

The course prepares students to construct effective interactive programmes designed for specific client populations. Using programme design principles and practices, students match learning activities to desired programme outcomes, while considering participant qualities and contextual features. Emphasis is placed on assessment, design, and evaluation knowledge and skills.

NOTE: Students who have received credit for LESR 261 may not take this course for credit.

AHSC 270 Introduction to Intervention in Human Systems (3 credits)

This course is an introduction to theory of human systems change from an interventionist perspective. It overviews general strategies of human systems intervention and salient models of practice highlighting conditions under which different intervention strategies are most effective. It especially focuses on the principles of fostering participation, collaborative inquiry, process facilitation and consultation, experiential learning, and action research. The course also features attention to values and ethical issues associated with specific strategies. NOTE: Students who have received credit for

APSS 250 may not take this course for credit.

AHSC 281 Introduction to Therapeutic **Recreation** (3 credits)

An examination of the fundamental concepts of therapeutic recreation. Included is the study of the historical foundations and the basic terminology, purposes, and theories of therapeutic recreation. NOTE: Students who have received credit for LESR 281 may not take this course for credit.

AHSC 298 Selected Topics in Applied Human Sciences (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

AHSC 310 Tourism in Canada (3 credits) This course presents an examination of the tourism industry in Canada, including concepts, research, practices, and promotion. Topics covered include destination motivation, commercial recreation, business travel, trends in tourism development, government agencies, the economics of promotion, social objectives, market segmentation, and ethical and legal considerations.

NOTE: Students who have received credit for LESR 210 or 211 may not take this course for credit.

AHSC 314 Adolescence: Issues and Intervention (3 credits)

Prerequisite: AHSC 220. This course links knowledge of adolescent development to a more detailed examination of related adolescent patterns and issues, including peer relations and friendship, parental and family relations, identity, sexuality and gender, and socio-economic and cultural influences. Directed towards students interested in working with adolescents, the course combines theoretical and practical knowledge relating to adolescents, their parents and their concerns for the purpose of enhancing the adolescent experience.

NOTE: Students who have received credit for APSS 313 may not take this course for credit.

AHSC 316 Adulthood: Patterns and **Transitions** (3 credits)

Prerequisite: AHSC 220, 230 or permission of the Department. This course examines transitions and developmental change through early adulthood and middle age. Featuring a narrative and autobiographical approach, it explores the nature and significance of life transitions, choices and contextual influences in shaping the course of adult life. It includes a consideration of the values inherent in notions of maturity, optimal environments, and interventions to enhance quality of life. NOTE: Students who have received credit for APSS 463 may not take this course for credit.

AHSC 319 Older Adulthood: Issues and Intervention (3 credits)

Prerequisite: AHSC 220. This course explores developmental change patterns and differences among people in older adulthood. Topics include retirement and pensions, concepts of health, fitness, well-being and models of health care, housing and transportation, leisure, family and social relations, ethnicity and aging, loss and grief, death and dying. Designed for persons interested in working with older adults, the course fosters awareness of myths, stereotypes and ageism, and emphasizes an attention to community social support and interventions which are enabling.

NOTE: Students who have received credit for APSS 318 or 419 or for this topic under a LESR 398 number may not take this course for credit.

AHSC 323 Women and Leisure (3 credits)
Prerequisite: 30 credits. This course explores
the many aspects of modern society that impact
upon women's leisure. Stereotypes, violence,
sexism, and societal expectations are topics
covered in this course. The historical, modern,
and future views of women at leisure are
discussed.

NOTE: Students who have received credit for this topic under a LESR 398 number may not take this course for credit.

AHSC 330 Leadership in Small Groups (6 credits)

Prerequisite: AHSC 230, 232, 260 previously or concurrently. This course develops facilitative approaches to leadership in small groups. Students learn effective ways to observe and to interpret the significance of group behaviour for the purpose of intervening effectively. The course highlights factors optimizing participation, patterns of communication and influence, decision-making, problem-solving, collaborative planning, conflict management, and effects of gender and other identity-related differences. It assists students to identify their leadership styles and to foster flexibility in adapting to diverse group situations.

NOTE: Students who have received credit for APSS 331 may not take this course for credit.

AHSC 333 Leisure and the Environment (3 credits)

Prerequisite: 30 credits. This course examines the state of the natural environment, and explains how leisure service providers play a crucial leadership role in fulfilling the needs of both the public and the environment.

NOTE: Students who have received credit for this topic under a LESR 398 number may not take this course for credit.

AHSC 335 Power and Conflict Resolution in Human Systems (3 credits)

Prerequisite: Completion of 30 credits for students enrolled in a social science programme or permission of the Department. This course gives students a theoretical and practical

overview of the role of power and conflict in human relationships and human systems — groups, organizations, and communities. The concept of power is explored in depth since the use of power is central in both the creation and the resolution of conflict. The course focuses on the development of analytical tools that serve to identify the different elements leading to, maintaining or escalating conflicts. Particular attention is given to ethics associated with the use of power and management of conflict.

AHSC 340 Employee Recreation Services (3 credits)

Prerequisite: AHSC 241. Examination of the origins and development of recreation related to the place of employment. Critical analysis of the research literature in the areas of: work/leisure relationships; cost/benefits; government intervention; programme design and family involvement.

NOTE: Students who have received credit for LESR 340 may not take this course for credit.

AHSC 350 Leisure Education (3 credits) Prerequisite: AHSC 241. This course offers an introduction to the field of leisure education. The history and underlying philosophy of the concept is presented. The roles of the school, community, and community-serving agencies are examined. Existing models are analysed and discussed.

NOTE: Students who have received credit for LESR 350 may not take this course for credit.

AHSC 351 Basic Counselling Skills and Concepts (6 credits)

Prerequisite: AHSC 230. This course introduces students to counselling theories and develops an understanding for theoretical and value frameworks of the helping relationship. It fosters the development of basic helping relationship skills applicable in everyday relationships in work and social settings. Skill areas include attending skills, such as attending to nonverbal behaviour, reflection of content, reflection of feeling, paraphrasing and summarizing; and influencing skills, such as interpretation and analysis. Also highlighted are ethical issues and attention to cultural differences.

NOTE: Students who have received credit for APSS 450 may not take this course for credit.

AHSC 355 Foundations of Family Life Education (3 credits)

Prerequisite: AHSC 230, 232, 254, 260 previously or concurrently, and enrolment in the Certificate in Family Life Education. This course examines Family Life Education from its inception as a field of practice to its current status in North America. It highlights complex related issues and the role of the educator, including attention to personal values and ethical principles of the practitioner. Topics include distinctions between prevention education and therapeutic intervention, and an overview of the range of different

family life education programmes and current practices.

NOTE: Students who have received credit for APSS 455 may not take this course for credit.

AHSC 360 Play, Adult Learning and Development (3 credits)

Prerequisite: AHSC 241. This course examines the concept of play in adult learning and development. Gender, age, ethnic and social class diversity are explored as they relate to adult play behaviour.

NOTE: Students who have received credit for LESR 360 may not take this course for credit.

AHSC 361 Leisure Services Leadership (3 credits)

Prerequisite: AHSC 230, 241. This course offers an analysis of leadership theory and its application to leisure services. Major topics are the principles and practices of leadership, group dynamics, leadership skill development and programme planning, and the unique role of the leisure leader.

NOTE: Students who have received credit for LESR 361 may not take this course for credit.

AHSC 370 Principles and Practices of **Human Systems Intervention** (3 credits)

Prerequisite: AHSC 270. The focus of this course is on the *practice* of human system intervention from a pragmatic as well as a theoretical perspective. The course emphasizes collaborative strategies for effecting change in human systems within a broad range of intervention alternatives. It focuses on the interventionist's role in effective change strategy development, initiation, management, and evaluation. Students can also expect to develop intervention practice skills including issue definition and assessment, data gathering techniques, intervention planning processes, information feedback mechanisms and processes, and change evaluation methodologies. The course

NOTE: Students who have received credit for APSS 250 may not take this course for credit.

is taught with a special focus on personal and

professional values and ethical issues related to

AHSC 371 Community Recreation Planning (3 credits)

human systems intervention.

Prerequisite: AHSC 241, 260. The course focuses on the application of recreation planning, theory, and skills. It examines methods and procedures used to assess client needs, design and deliver programs and services, and evaluate their impact. Practical experience is gained through a combination of field experience, project planning, and group work. NOTE: Students who have received credit for LESR 371 may not take this course for credit.

AHSC 375 Organizational Leadership: A Human Systems Approach (3 credits)

Prerequisite: AHSC 270 or permission of the

Department. This course is an introduction to the practice of leadership in organizations with a human systems approach and perspective. The course examines a range of theoretical concepts current in organizational leadership practice including systems thinking, team-based leadership, and strategy formulation from a leadership perspective. It provides an opportunity for students to examine ethics, values, and abilities required in organizational leadership today.

AHSC 380 Quantitative Research Methods for Practitioners (3 credits)

Prerequisite: SOCI 212 or equivalent. This course gives an overview of a range of data collection and analysis strategies which are relevant to collaborative and participative intervention practice. It examines practical considerations for selecting specific quantitative approaches and prepares students to formulate and administer intervention-related questionnaires, to conduct basic quantitative analyses, and to present data results to interested individuals and groups. The course also examines basic ethical requirements in conducting applied social research.

NOTE: Students who have received credit for APSS 490 may not take this course for credit.

AHSC 381 Concepts in Therapeutic Recreation Programming (3 credits)

Prerequisite: AHSC 241, 260, 281. This course explores current therapeutic recreation practices with emphasis on rehabilitation in community and clinical settings such as hospitals, group homes, psychiatric centres, rehabilitation clinics, and correctional centres. Leisure planning and assessment models are studied to identify the modes of recreational activity which may be used as an intervention.

NOTE: Students who have received credit for LESR 381 may not take this course for credit.

AHSC 382 Qualitative Research Methods for Practitioners (3 credits)

Prerequisite: AHSC 380 (recommended to be taken in the same academic year). This course gives an overview of a range of qualitative approaches to practical projects and interventions. It prepares students to design and conduct interviews (including making decisions about respondent selection) with individuals and in focus groups, as well as participant observation. It also enables students to analyse qualitative data from these sources as well as documentary sources in light of practical project purposes. The course highlights special ethical considerations in conducting qualitative forms of applied social research.

NOTE: Students who have received credit for APSS 490 may not take this course for credit.

Therapeutic Recreation and **AHSC 383** Physical Disabilities (3 credits)

Prerequisite: AHSC 220, 281. This course gives

an overview of the role and impact of therapeutic recreation services for individuals with physical disabilities and limitations. It analyses the barriers to recreation participation along with the planning and designing of a safe and accessible recreational environment. NOTE: Students who have received credit for LESR 481 may not take this course for credit.

AHSC 384 Therapeutic Recreation: Cognitive Disabilities and Illness (3 credits)

Prerequisite: AHSC 220, 281. This course gives an overview of the role of therapeutic recreation services for individuals with cognitive disabilities and limitations or illness. It focuses on the etiology, impact, and barriers related to specific conditions. It also studies legislation trends and resources for community recreation integration and the role of transitional programmes. NOTE: Students who have received credit for LESR 481 may not take this course for credit.

AHSC 398 Selected Topics in Applied Human Sciences (3 credits)

AHSC 399 Selected Topics in Applied Human Sciences (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

AHSC 420 Organization Development (6 credits)

Prerequisite: AHSC 230, 232, 330, 370. This course examines organizations as systems and models of practice for organization change. Emphasizing process consultation, it provides knowledge concerning entry and contracting; identifying organizational problems and goals for change; analysing organizational structures and dynamics relevant to intervention planning; methods of gathering, organizing, and presenting pertinent data to the organization; collaborative intervention planning; approaches to evaluating intervention outcomes; ethical considerations; and the impact of personal values and priorities.

NOTE: Students who have received credit for APSS 420 may not take this course for credit.

AHSC 421 Political and Legal Aspects of Leisure Services (3 credits)

Prerequisite: AHSC 241; 60 credits. This course provides students with a theoretical understanding of the complexity of providing leisure services in the province of Québec. The course examines the administration of leisure services in municipal, regional, provincial, and federal governments. The course examines law as it applies to aspects of recreational activities in the areas of organization, supervision, and participation. The course covers the Québec Civil Code, the Canadian Constitution, and the Québec and Canadian

Charter of Rights and Freedoms as they apply to the study of leisure.

NOTE: Students who have received credit for LESR 420 or 428 or for this topic under a LESR 398 or 498 number may not take this course for credit.

AHSC 422 Youth and Leisure (3 credits)
Prerequisite: AHSC 330 or 361. This course
develops an understanding of the leisure needs
of youth from emotional, physical, psychological,
and sociological perspectives. Major areas of
discussion include leisure preferences and
needs assessment, strategies for programming,
dealing with youth-at-risk, and recreational
opportunities for youth. Lectures and laboratory.
NOTE: Students who have received credit for
this topic under a LESR 399 number may not
take this course for credit.

AHSC 427 Administration of Leisure Services (3 credits)

Prerequisite: AHSC 361; AHSC 371 or 381; 60 credits. This course offers an analysis of the processes involved in planning and managing leisure service delivery systems. Topics to be studied include principles of planning, organization, budgeting, and supervision. NOTE: Students who have received credit for LESR 426 or 427 may not take this course for credit.

AHSC 431 Leisure Sciences Seminar (3 credits)

Prerequisite: AHSC 361, 371; HIST 215; PHIL 255; 60 credits. This is a third-year interdisciplinary seminar in which students can tie together all they have learned in the Leisure Studies programme. Additionally, students are set on a course of study that should continue after they graduate so that they can keep up with future developments in this area. NOTE: Students who have received credit for LESR 431 may not take this course for credit.

AHSC 432 Seminar in Therapeutic Recreation (3 credits)

Prerequisite: AHSC 361, 381; HIST 215; PHIL 255; 60 credits. This is a third-year interdisciplinary seminar in which students can tie together all that they have learned in the Therapeutic Recreation programme. Additionally, students are set on a course of study that should continue after they graduate so that they can keep up with future developments in this area.

NOTE: Students who have received credit for LESR 432 may not take this course for credit.

AHSC 435 Fieldwork Practice (3 credits)
Prerequisite: AHSC 330. This course must be taken in final year. This course provides an opportunity for students to integrate theory into practice in the design, facilitation and evaluation of small group process. Students lead one small task or learning group in a community, an

organizational or an institutional setting. The fieldwork is combined with class sessions for orientation, supervision, reflection and evaluation.

AHSC 437 Internship in Leisure Sciences (6 credits)

Prerequisite: AHSC 241, 260, 361, 371. This course provides students with an opportunity to design, implement, and evaluate programmes; to facilitate groups in a variety of settings; and to establish working relationships with field personnel. In consultation with their supervisors, students select a site related to their learning interests. Students learn to develop and manage their own project and to self-assess their work. The course includes fieldwork, seminars, and team meetings.

NOTE: Students who have received credit for LESR 464 or AHSC 436 may not take this course for credit.

AHSC 438 Internship in Therapeutic Recreation I (9 credits)

Prerequisite: AHSC 260, 281, 361, 381. This course provides students with an opportunity to design, implement, and evaluate programmes. to facilitate groups in a variety of settings, and to establish working relationships with field personnel. In consultation with their supervisors, students select a site related to their learning interests. Students learn to develop and manage their own project and to self-assess their work. The course includes fieldwork, seminars, and team meetings.

NOTE: Students who have received credit for LESR 464 or AHSC 436 may not take this course for credit.

AHSC 439 Internship in Human Relations (6 credits)

Prerequisite: AHSC 230, 232, 330, 370; AHSC 420 or 440 previously or concurrently; permission of the Department. This course provides students with an opportunity to design, implement, and evaluate small group leadership in several settings, and to negotiate working relationships with site personnel. Students will be solely responsible for facilitating several task or learning groups in community, work, or educational settings. The sites will be selected according to students' learning interests and in consultation with the course instructor. The course includes supervisory team meetings and internship seminar sessions.

AHSC 440 Community Development (6 credits)

Prerequisite: AHSC 230, 232, 330, 370. This course examines basic community development models of practice, the development of the intervenor-community relationship, and approaches to analysing and defining community problems and issues. Students learn to identify community structures and inter-group dynamics relevant to intervention planning, to gather and

organize data for use by communities, to develop intervention plans which foster community participation and leadership, and to evaluate intervention outcomes. The course fosters critical awareness of ethical considerations and of issues such as respecting diverse cultural and value differences.

NOTE: Students who have received credit for APSS 440 may not take this course for credit.

AHSC 444 The Older Adult and Leisure (3 credits)

Prerequisite: AHSC 232 or 361. This course examines the aging process in the physical, cognitive, and affective domains. It familiarizes the student with the characteristics of the aging population as related to leisure, recreation, and lifestyle. It focuses on developing and understanding the impact of lifelong leisure in the aging process. The course reviews issues related to the phenomenon of leisure in retirement and discusses the process of delivering leisure services to older individuals.

NOTE: Students who have received credit for LESR 336 may not take this course for credit.

AHSC 450 Leisure Assessment and Counselling (3 credits)

Prerequisite: AHSC 350; 60 credits. This course focuses on the use of assessment applied to individual leisure abilities, interests and needs, and the application of counselling theory to the field of leisure services. A variety of assessment tools are analysed/interpreted. Theories, models, and methods of leisure counselling are discussed. NOTE: Students who have received credit for LESR 450 may not take this course for credit.

AHSC 460 Health Promotion (6 credits) Prerequisite: AHSC 232 or 361. This course helps students to develop intervention skills and theoretical understanding in the area of health promotion. It is of particular interest to students whose career interests involve lifestyle planning, health promotion, and stress management. Topics include health and wellness, stress and illness, psychological and physical self-appraisal processes, psychosomatic processes and disorders, understanding addictions and their management, health-promotion interventions, behavioural self-management, and issues in medical/psychological health compliance. NOTE: Students who have received credit for APSS 460 may not take this course for credit.

AHSC 470 Basic Human Relations Laboratory (3 credits)

Prerequisite: Final year and permission of the Department. This is an intensive format six-day learning session through which students may expect to increase their awareness of how their behaviour affects others, increase their skill and understanding of effectively and responsibly communicating to and exchanging feedback with others, increase their understanding of

leadership and authority relations, and deepen their understanding of group dynamics. Evaluation is on a pass/fail basis.

AHSC 490 Independent Study I (3 credits)
Prerequisite: Permission of the Department.
Students work on topics in consultation with a
study supervisor. The study may include
readings, field studies, and/or research.
NOTE: Students who have received credit for
LESR 490 may not take this course for credit.

AHSC 491 Independent Study II (3 credits)
Prerequisite: Permission of the Department. A
student who has received credit for AHSC 490
may register for AHSC 491.

NOTE: Students who have received credit for LESR 491 may not take this course for credit.

AHSC 498 Advanced Topics in Applied Human Sciences (3 credits)

AHSC 499 Advanced Topics in Applied Human Sciences (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.030

BIOLOGY

Faculty

Chair DAPHNE FAIRBAIRN, Professor

Professors
PAUL J. ALBERT
EDWARD J. MALY
ELAINE B. NEWMAN
ROBERT M. ROY
ROSE SHEININ
REGINALD K. STORMS

Associate Professors RICHARD T. CRONIN, s.j. LUC-ALAIN GIRALDEAU JAMES GRANT PATRICK J. GULICK MURIEL B. HERRINGTON NARINDER N. KAPOOR BHUPINDER MANGAT J. DANIEL McLAUGHLIN SYLVIA M. RUBY ADRIAN TSANG PAUL WIDDEN CLAIRE CUPPLES

Assistant Professors LUC VARIN WILLIAM ZERGES

Professor Emeritus RAGAI K. IBRAHIM

Adjunct Professors CAROLYN BECKMAN KULDIP DHINDSA RALPH GERMINARIO JACK A. KORNBLATT LOLITA ZAMIR

Location

Sir George Williams Campus Hall Building, Room: H 1260-6 (514) 848-3400

Department Objectives

The Biology Department is dedicated to teaching and research that advance understanding of life from molecules and cells to organisms, populations, and entire ecosystems. The Department's programmes inspire students with an appreciation of the rich diversity of the living world. Students acquire a comprehensive grounding in modern biology through classroom study as well as extensive hands-on training in research methodology. A variety of specialized laboratories and equipment supports both research and teaching activities.

Programmes

The Biology Department offers Honours and Specialization programmes in Biology, Cell and Molecular Biology, and Ecology, as well as Major and Minor programmes in Biology. Students planning a career or graduate studies in the biological sciences are normally expected to follow the appropriate Honours or Specialization programme. The Major programme is designed for students who wish to concentrate their studies in biology but at the same time wish to pursue general education in other disciplines. The Major programme can be combined with a Major in another department.

Students registered in the Honours, Specialization, or Major in Biology may select Biology electives in various subject areas in order to obtain a broad overview of the discipline. However, it is possible for students to pursue in-depth studies in specific areas such as animal biology, plant biology, or microbiology and biotechnology.

The Minor programme can only be taken by students registered in another degree programme and provides an opportunity to gain a basic exposure to the main sub-disciplines of Biology or to pursue one such area in some depth.

Students are strongly encouraged to take advantage of academic counselling services available in the Biology Department in order to select the programme and courses that best meet their needs. Students may transfer among programmes after the first year of study since the core courses in all programmes are quite similar.

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

Students must apply to the departmental Honours adviser for formal admission to Honours programmes. The application is usually made after completion of the first-year courses.

- 72 BSc Honours in Biology
- 33 CHEM 221^{3*}, 222^{3*}, 271³, BIOL 225³, 226³, 227³, 261³, 266³, 367³, 490⁶
- 3 Chosen from BIOL 3223****; CHEM 2123
- 3 Chosen from BIOL 346³, 364³, 383³, 449³, 483³

33 Additional Biology credits*; a minimum of 12 credits in 300-level Biology courses and nine credits in 400-level Biology courses must be completed. A minimum of six credits must be selected from courses dealing with the biology of organisms from the following: BIOL 3213 334³, 335³, 337³, 344³, 346³, 370³, 383³, 385³, 386³, 387³, 433³, 435³, 437³, 449³, 483³.

BSc Honours in Cell and Molecular Biology

- CHEM 212³, 221^{3*}, 222^{3*}, 271³, 375³, 477³; BIOL 225³, 226³, 261³, 266³, 364³, 367³, 368³, 466³, 490⁶
- 9 300- or 400-level Biology credits
- 15 400-level Biology and Chemistry elective credits including a minimum of: 9 Cell and Molecular Biology credits selected from: BIOL 4413, 4433, 4613 462³, 464³, 465³, 468³, 469³, 470³, 471³, 498³*** 3 Biochemistry credits selected from: CHEM 4713, 4723, 4783, 4813, 4983***

72 BSc Honours in Ecology

- CHEM 221^{3*}, 222^{3*}, 271³; BIOL 225³, 226³, 227³, 261³, 266³, 367³, 450³, 490⁶
- Chosen from BIOL 322³ or equivalent Chosen from BIOL 346³, 364³, 383³,
- 449³, 483³
- Chosen from BIOL 321³, 350³, 351³, 12 353³. 354³
- Chosen from BIOL 451³, 457³, 458³, 459³
- Biology elective credits at the 300 or 400 level.

BSc Specialization in Biology 60

- CHEM 2213*, 2223*, 2713; BIOL 2253, 27 226³, 227³, 261³, 266³, 367³
- 3 Chosen from BIOL 3223****; CHEM 2123
- Chosen from BIOL 346³, 364³, 383³, 449³, 483³
- Additional Biology credits*; a minimum of 12 credits in 300-level Biology courses and six credits in 400-level Biology courses must be completed. A minimum of six credits must be selected from courses dealing with the biology of organisms from the following: BIOL 3213, 334³, 335³, 337³, 344³, 346³, 370³, 383³, 385³, 386³, 387³, 433³, 435³, 437³, 449³, 483³.

BSc Specialization in Cell and Molecular Biology

- 42 CHEM 212³, 221^{3*}, 222^{3*}, 271³, 375³ 477³; BIOL 225³, 226³, 261³, 266³, 364³, 367³, 368³, 466³
- 300- or 400-level Biology credits
- 400-level Biology and Chemistry elective credits including a minimum of: 9 Cell and Molecular Biology credits selected from: BIOL 4413, 4433, 4613 462³, 464³, 465³, 468³, 469³, 470³, 471³,
 - 3 Biochemistry credits selected from: CHEM 471³, 472³, 478³, 481³, 498³***

60 BSc Specialization in Ecology

- 27 CHEM 2213*, 2223*, 2713; BIOL 2253, 226³, 227³, 261³, 266³, 367³
- Chosen from BIOL 3223 or equivalent 3
- Chosen from BIOL 346³, 364³, 383³, 449³, 483³
- Chosen from BIOL 321³, 350³, 351³, 353³, 354³
- Chosen from BIOL 450³, 451³, 457³, 458³, 459³
- Biology elective credits at the 300 or 400 level.

BSc Major in Biology 45

- CHEM 2213*, 2223*, 2713; BIOL 2253, 27 226³, 227³, 261³, 266³, 367³ Chosen from BIOL 322^{3****}; CHEM 212³
- Chosen from BIOL 346³, 364³, 383³, 449³, 483³
- Additional Biology credits*; a minimum of nine credits in 300- and 400-level Biology courses must be completed.

24 Minor in Biology

- Chosen from BIOL 2063 or 2613; 2253, 12 226³, 227³
- 12 Biology elective credits

*Students entering the programme with cégep Organic Chemistry must replace these credits with elective credits.

**Intermediate Topics in Biology (BIOL 398) and Advanced Topics in Biology (BIOL 498) may be taken as elective courses where the special topic is appropriate.

***Advanced Topics in Biology (BIOL 498) and Advanced Topics in Chemistry (CHEM 498) may be taken as elective courses where the special topic is appropriate.

***See §200.7.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

BIOL 200 Fundamentals of Human **Biology** (6 credits)

A series of lectures, demonstrations, and seminars to provide non-biologists with a general survey of the fundamental principles of life, with special emphasis on the structures and functions of human beings. Lectures only. NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit. Students who have completed cégep Biology 921/931 may not take this course for credit.

BIOL 201 *Introductory Biology* (3 credits) Fundamentals of plant and animal biology: basic physics and chemistry of life; cell and tissue structures and functions; anatomy and physiology of human systems; survey of plant and animal taxonomy, ecology, heredity, and evolution. Lectures and laboratory.

NOTE: Students with cégep Biology 301 or equivalent may not take this course for credit. Students entering BIOL programmes without cégep Biology 301 or equivalent must take this course, but not for programme credit.

BIOL 202 General Biology (3 credits)

This course presents the fundamentals of biology including the basic physics and chemistry of life, the structure and functions of cell and tissues, and aspects of anatomy, physiology, taxonomy, heredity and evolution, with examples ranging from micro-organisms to humans. Lectures only. NOTE: Students with cégep Biology 301, BIOL 201 or BIOL 298A may not take this course for credit. Students enrolled in BSc programmes may not take this course for credit.

BIOL 203 Fundamental Nutrition (3 credits)

This course deals with food composition (carbohydrates, lipids, proteins, vitamins, and minerals), its absorption and utilization, energy balance, special diets, and food technology. Lectures only. NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit.

BIOL 206 Elementary Genetics (3 credits)
A survey of classical and contemporary developments in the study of heredity, with particular attention to human examples. This course is open to the general student body. Lectures only. NOTE: Students may not take this course for credit with BIOL 261.

BIOL 207 Micro-Organisms and Humanity (3 credits)

A course designed for students registered in a programme other than one leading to the BSc degree. It considers the role of micro-organisms in plant and animal diseases, food spoilage, cellulose degradation, and water pollution, as well as their ecological, industrial, and pharmacological importance. Lectures only. NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit.

BIOL 208 Environmental Biology (3 credits)

This course examines the principles and concepts of ecosystems, the interaction of organisms and their environment. Energy flow and nutrient cycling in ecosystems, population dynamics, and community organization. Lectures only. NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit.

BIOL 210 Genetics and Human Welfare (3 credits)

A course on the principles of heredity as understood by modern biology. It deals also with the application of genetic principles to organisms, including humans. The biological basis of social problems is dealt with at some length. Organic evolution and its implications for human life and welfare are considered. Lectures only. NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit; may not be taken for credit with BIOL 206.

BIOL 225 Form and Function of Organisms (3 credits)

Prerequisite: Cégep Biology 301 or BIOL 201. An introduction to plant and animal form and function is presented. This course provides an overview of basic physiological and morphological aspects of plants and animals that allow survival and reproduction. Topics in animal biology include animal architecture, internal fluids, homeostasis, digestion and nutrition, nervous and chemical coordination; topics in plant biology include plant organization, photosynthesis, respiration, water relations, and growth regulation. Reproduction and development of both plants and animals are introduced. Lectures only.

NOTE: Students who have received credit for BIOL 230 and 240, or BIOL 298D may not take this course for credit.

BIOL 226 Biodiversity and Ecology (3 credits)

Prerequisite: Cègep Biology 301 or BIOL 201. This course introduces the evolution, biodiversity, and ecology of organisms. The origin and diversity of life, from prokaryotes, through simple eukaryotes to multi-cellular organisms are introduced. Natural selection, speciation, and phylogeny, stressing evolutionary relationships in conjunction with changing conditions on earth, are presented. The course introduces major concepts in ecology: the physical and chemical environment, population structure, life histories, species interactions, communities, and ecosystems. Lectures only.

NOTE: Students who have received credit for BIOL 250 and 270, or BIOL 298E may not take this course for credit.

BIOL 227 Laboratory Studies of Organisms (3 credits)

Prerequisite: BIOL 226; BIOL 225 previously or concurrently. Laboratory exercises are designed to acquaint students with biodiversity and to introduce methodologies common to studies of organisms and populations. This course includes field trips, dissections, use of taxonomic keys, and basic exercises in physiological function. Use of the microscope, variability within populations, basic techniques in microbiology, and elementary population dynamics are presented. Tutorials include videotapes of plant and animal

diversity, history, and behaviour. Laboratory and tutorial.

NOTE: Students who have received credit for BIOL 230, 240, and 270 may not take this course for credit.

BIOL 261 Molecular and General Genetics (3 credits)

Prerequisite: Cégep Biology 301 or BIOL 201; CHEM 221 previously or concurrently. Basic genetic principles, including mechanisms of meiosis and mitosis, Mendelian genetics, recombination, gene mapping, and chromosome rearrangements; an introduction to molecular genetics, including nucleic acid structure and biosynthesis transcription and translation; the course also includes an introduction to recombinant DNA technology and to concepts of population genetics. Lectures and tutorials.

BIOL 266 Cell Biology (3 credits)
Prerequisite: BIOL 261; CHEM 271 previously or concurrently. Structure and functions of the cell and its organelles: cytoskeleton, chromosomes, cell cycle and cell division, organelle biogenesis, cell differentiation, including the immune system and cell communication. Lectures only.

NOTE: Students who have received credit for BIOL 365 or this topic under a BIOL 298 number may not take this course for credit.

BIOL 298 Selected Topics in Biology (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

BIOL 321 Evolution (3 credits)

Prerequisite: BIOL 225, 226. Through readings, discussions, and lectures, students explore the evidence for evolution, as well as current theories for the mechanisms that cause evolutionary change. Topics covered include principles of inheritance, the origin of genetic variation, adaptation through natural selection, random processes in evolution, the origin of species, and the role of macroevolutionary processes in shaping current patterns of biodiversity. Lectures only.

NOTE: Students who have received credit for BIOL 359 may not take this course for credit.

BIOL 322 Biostatistics I (3 credits)
Prerequisite: Twelve (12) BIOL credits in a
Biology Major, Honours, or Specialization
programme. Statistical methods for the
biological sciences; sampling; experimental
design; data description; elementary probability;
binomial, Poisson and Normal distributions;
statistical inference; hypothesis testing;
chi-square; analysis of variance; correlation;
regression; covariance analysis; and analogous
non-parametric techniques. Lectures and
laboratory. NOTE See §200.7

BIOL 334 Vertebrate Embryology

(3 credits)

Prerequisite: BIOL 225, 226, 227 previously or concurrently. The fundamental processes of growth and development in vertebrates are examined. Morphogenetic events in selected vertebrate species are compared by laboratory study. Topics covered include reproduction, gemetogenesis, fertilization, cleavage patterns, gastrulation, organogenesis, metamorphosis, regeneration, and extra-embryonic membranes. Lectures and laboratory.

BIOL 335 Histology I (3 credits)

Prerequisite: BIOL 225. A comparative study of the microscopic characteristics of cells, tissues, and organs of vertebrates. Lectures and laboratory.

BIOL 337 Invertebrate Diversity

(3 credits)

Prerequisite: BIOL 225, 226, 227. This is a survey course that examines the phylogeny, structure, and some general aspects of the biology of the major invertebrate phyla. Lectures will emphasize phylogenetic and biological topics; classification and morphology will be emphasized in the laboratory. Lectures and laboratory.

BIOL 344 Biology of Algae (3 credits)
Prerequisite: BIOL 225, 226, 227 previously or
concurrently. Taxonomy, physiology, and
ecology of algae, with special consideration of
their involvement in water pollution, sewage
treatment, primary production, and their
utilization in industry. Lectures and laboratory.
NOTE: Students who have received credit for
BIOL 246 may not take this course for credit.

BIOL 346 Physiology of Plant Development (3 credits)

Prerequisite: BIOL 225, 226, 227 previously or concurrently. Physiological and biochemical aspects of plant growth and development. Plant responses to growth regulators, their mode of action and their use in plant tissue culture. The role of light and temperature in seed germination, dormancy, and flowering. Lectures and laboratory.

BIOL 350 The Ecology of Individuals (3 credits)

Prerequisite: BIOL 225, 226. This course is designed to introduce students to the diversity of adaptations possessed by individuals which enables them to interact successfully with the abiotic and biotic environment. Major topics include adaptive responses to temperature, water, light, and other species. Physiological adaptations are emphasized. Lectures only. NOTE: Students who have received credit for BIOL 398A (Intermediate Concepts in Ecology) may not take this course for credit.

BIOL 351 Basic Population Ecology (3 credits)

Prerequisite: BIOL 226. This course introduces

the processes which determine the distribution and abundance of individuals in populations. Population growth, density-dependent and density-independent population regulation, survivorship, life history parameters, the population dynamics of competition, predation and parasitism, and the roles of predation and competition in affecting community structure are discussed. Lectures and tutorials. NOTE: Students who have received credit for

BIOL 353 Communities and Ecosystems (3 credits)

BIOL 454 may not take this course for credit.

Prerequisite: BIOL 225, 226; BIOL 227 previously or concurrently. This course presents an introduction to biological communities, the processes that maintain them and their emergent properties. Topics include the interactions between abiotic and biotic factors in determining community composition, the concepts of niche and habitat, succession theory, community diversity and stability, energy flow and nutrient cycling. Examples emphasize both aquatic and terrestrial ecosystems, and the major global biomes. Lectures only.

BIOL 354 Behavioural Ecology (3 credits) Prerequisite: BIOL 226. Behavioural ecology is the study of behavioural adaptation. The topics include foraging, anti-predator, fighting, mating, reproductive and social behaviour. Students will be introduced to optimality and game theories. Lectures and tutorials.

NOTE: Students who have received credit for BIOL 358 or 453 may not take this course for credit.

BIOL 364 Cell Physiology (3 credits)
Prerequisite: BIOL 266. A survey of the mechanisms and physical processes involved in the functions of single cells and organelles, especially membrane-mediated functions: structures and properties of membranes, transport, signal transduction, motility, energy transduction.

Lectures only.

BIOL 366 Mechanisms of Development (3 credits)

Prerequisite: BIOL 225, 226, 227, 261. This course deals with the mechanisms of cellular interaction and genetic control which govern animal development and cell differentiation. This includes how cell movement and cell recognition take place, how the genome is restricted in differentiation, how cytoplasmic signals influence differentiation, how gradients affect development, how genes control segmentation, and how oncogenes, growth factors, and hormones influence development. The role of genetic engineering in the understanding of developmental processes is discussed. Lectures only. NOTE: Students who have received credit for BIOL 463 may not take this course for credit.

BIOL 367 *Molecular Biology* (3 credits) Prerequisite: BIOL 261; CHEM 271. DNA structure, recombination, gene structure, gene expression, and its regulation. The experimental evidence that supports these concepts is also discussed. Lectures and tutorials.

NOTE: Students who have received credit for this topic under a BIOL 398 number may not take this course for credit.

BIOL 368 Genetics and Cell Biology Laboratory (3 credits)

Prerequisite: BIOL 364 previously or concurrently; CHEM 212 or 217. This course introduces students to the basic laboratory techniques of genetics, molecular biology, and cell biology. Experiments include identification, characterization, and genetic mapping of bacterial mutants, isolation of bacterial DNA and its use for transformation. Primary cultures of mammalian lymphocytes are studied with respect to proliferation using an ELISA technique. Physiological studies include cell membrane functions in red blood cells, active and facilitated transport in bacteria, oxygen evolution and ATP synthesis in chloroplasts, ATP synthesis and electron transport in mitochondria and nerve action potentials. Laboratory and tutorials.

BIOL 370 *Microbiology* (3 credits)
Prerequisite: Six credits chosen from BIOL 226, 261, CHEM 271; or permission of the Department. This course provides an in-depth study of the structure and function of microbes. It emphasizes the genetic and biochemical characteristics of microbes which distinguish them from plants and animals. Consideration is also given to the impact of microbes on the global environment and on the quality of human life. Lectures and laboratory.

BIOL 380 Nutrition (3 credits) Prerequisite: CHEM 221, 222; CHEM 271 recommended. The concept of a balanced diet is studied in relation to caloric content and to protein, lipid, carbohydrate, vitamin, and mineral requirements. The consequences of dietary deficiencies are examined. Special topics such as dieting, organic foods, megavitamins, food additives, and toxins are discussed. Lectures only.

BIOL 381 Biology of Pollutants (3 credits) Prerequisite: BIOL 225, 226. The purpose of this course is to study the impact of pollution on ecosystems. The major classes of pollutants are considered in relation to their nature, origin, and distribution, and particularly their mode of action on individual organisms and ecosystems. Air, water, and soil are examined with their respective pollutants and a major emphasis is given to quantitative assessments of various agents and their effects. The course also includes theoretical and practical aspects of bio-assays, and an overview of case studies and of control measures. Lectures only.

BIOL 383 Animal Physiology I (3 credits) Prerequisite: BIOL 225, 226, 227; CHEM 271. A study of basic cellular and physiological mechanisms in vertebrates. Topics discussed include regulation of animal internal environment, neuro-muscular physiology, sensory mechanisms, and control of body movements. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 333 or PSYC 358 may not take this course for credit.

BIOL 385 Entomology (3 credits) Prerequisite: BIOL 225; BIOL 226 previously or concurrently, BIOL 227 recommended. This course introduces the student to the variety and complexity of insect life. Basic classification is followed by a more detailed study of morphology and anatomy, together with some physiological considerations. Other topics such as adaptations for aquatic life and social behaviour are discussed. Laboratories begin with a field trip, the object of which is to observe and collect various insect species. The rest of the laboratory sessions complement the lectures. Lectures and laboratory. NOTE: Students who have received credit for BIOL 232 may not take this course for credit.

BIOL 386 Insect Behaviour and Physiology (3 credits)

Prerequisite: BIOL 225, 226. This course deals with insect physiology and behaviour. It emphasizes the relationships between structure and function of various insect parts. The lecture topics will include the following: introduction to insect behaviour, vision, gustation, olfaction, phermones, hormones, light production, sound production and perception, social behaviour, diapause, migration, insect control, and coevolution of insects and plants. Lectures only. NOTE: Students who have received credit for BIOL 398D may not take this course for credit.

BIOL 387 Vertebrate Anatomy (3 credits)
Prerequisite: BIOL 225, 226, 227. Study of anatomical structures of a representative series of vertebrates from a comparative and evolutionary perspective, with some special emphasis on the mammals. In laboratory periods, representatives of selected classes of vertebrates are dissected. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 331 may not take this course for credit.

BIOL 398 Intermediate Topics in Biology (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

BIOL 433 Parasitology (3 credits)
Prerequisite: BIOL 225, 226, 227; 337 recommended. A survey of the parasitic groups of invertebrates, with special reference to human parasites. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 332 may not take this course for credit.

BIOL 435 Advanced Histology (3 credits)

Prerequisite: BIOL 335. An advanced comparative study of the vertebrate organ systems at the ultrastructural and histological level. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 336 may not take this course for credit.

BIOL 437 Invertebrate Functional Biology (3 credits)

Prerequisite: BIOL 337. This course will examine the ways in which various functions, including feeding, gas exchanges, osmoregulation, neural and chemical coordination, are accomplished in invertebrate animals. Each process will be examined in the context of its basic physiological and physical elements, then examined in a variety of invertebrate animals to illustrate how each accomplishes the particular function. Lectures only.

NOTE: Students who have received credit for BIOL 338 may not take this course for credit.

BIOL 441 *Plant Biochemistry* (3 credits) Prerequisite: BIOL 367. Biochemical study of the natural constituents and secondary metabolites unique to plants. Their biosynthesis, biotransformations, and functions in plants, as well as their economic and pharmacologic importance are stressed. Lectures only.

BIOL 442 Perspectives in Plant Tissue Culture and Plant Biotechnology (3 credits)

Prerequisite: BIOL 346. This course looks at plant-growth regulators, nutritional requirements, and other factors necessary for in-vitro culturing of plant cells and tissues. The course also discusses methods available for nuclear transfers and the propagation of transformed plants. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 443 Plant Molecular Genetics (3 credits)

Prerequisite: BIOL 367. This course analyses plant genome structure, mRNA population complexity, gene-cloning strategies, gene transfer in plants, gene regulation, and a survey of topics such as signal transduction, plant disease resistance, herbicide resistance, metabolic engineering, and environmental stress resistance. Innovative applications of molecular analysis and genetic engineering in plants have had a dramatic impact on our basic understanding of plant growth and development, on genetic improvements of commercial varieties of crop plants, and on novel applications such as the production of pharmaceutical compounds, plastics and mammalian antibodies in plants. Lectures only. NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 449 Physiology and Metabolism of Higher Plants (3 credits)

Prerequisite: A minimum of three credits chosen from BIOL 346, 350, 353, 367, 383. This course deals with the physiological and biochemical processes of higher plants, blending modern molecular approaches with traditional physiological and biochemical methods and environmental physiology to understand how plants work. Topics include the role of water and minerals in the normal development of plants, how carbon is fixed during photosynthesis, the utilization and metabolism of photosynthesis products, and the assimilation of nitrogen and sulphur. These processes are discussed in relation to the environmental factors which govern them. Lectures only.

NOTE: Students who have received credit for BIOL 349 may not take this course for credit.

BIOL 450 Techniques in Ecology (3 credits)

Prerequisite: BIOL 227, 322 or equivalent, and a minimum of six credits from BIOL 321, 350, 351, 353, 354. This course introduces students to a variety of techniques of experimental design, data collection, and quantitative analysis. Students participate in a series of modules, each of which presents experimental and analytical techniques appropriate for one area of modern research in ecology, behaviour, or evolution. Some modules require students to collect and subsequently analyse original data from field or laboratory settings. Modules and their contents may vary from year to year. Tutorials and laboratory.

BIOL 451 Plant Field Ecology (3 credits) Prerequisite: BIOL 322 or equivalent, BIOL 353. This course is designed to give students practical experience working with plant communities. It is offered at a field station during the last two weeks of August, and residence is mandatory. Students learn to identify plant species occurring in field, forest, and mountain communities, with the aim of describing and understanding plant community patterns. Methods of sampling and statistical analysis of population and community data are discussed and applied. The course is a combination of formal lectures, organized field studies, and informal discussions. Students are required to hand in a series of written reports and a plant collection after the course has ended. NOTE: Students who have received credit for BIOL 352 may not take this course for credit.

BIOL 457 Applied Ecology and Conservation Biology

(3 credits)

Prerequisite: A minimum of nine credits chosen from BIOL 321, 350, 351, 353, 354. This course applies principles of ecology at the individual, population, community and ecosystem level to identify and solve practical environmental problems. Topics include pollution, climate

change, farming, harvesting renewable resources, designing nature reserves and conserving biodiversity. Lectures and tutorials.

BIOL 458 Decomposer Communities and Nutrient Cycling (3 credits)

Prerequisite: BIOL 353. This course examines the role of the microbial community in the fundamental processes of decomposition and nutrient cycling. We discuss the role of microbes in the breakdown of organic molecules and the release and transformation of mineral elements. Emphasis is placed on the interactions between bacteria, fungi, and the microfauna in decomposition and on the role of interactions between plants and microbes in the maintenance of nutrient cycles. Lectures and laboratory. NOTE: Students who have received credit for BIOL 356 may not take this course for credit.

BIOL 459 Aquatic Ecology (3 credits)
Prerequisite: BIOL 322 or equivalent, BIOL 353.
This course introduces the student to aquatic ecosystems. The first half of the course concentrates on the biological basis of primary and secondary productivity. The second half of the course explores the ecology of fishes at the individual, population, community, and ecosystem levels of analysis. Lectures, field trips, and laboratory.

NOTE: Students who have received credit for BIOL 355 or 431 may not take this course for credit.

BIOL 460 Molecular Genetics (3 credits)
Prerequisite: BIOL 367. Basic microbial and
molecular genetics, including isolation and
characterization of mutants, methods of
mapping mutants, transposons, episomes, and
recombinant DNA techniques. Lectures and
conferences.

BIOL 461 Advanced Genetics (3 credits)
Prerequisite: BIOL 367. Directed readings and
seminars in classical and contemporary
genetics designed to expose the student to
research literature and problems. Students
probe in greater depth areas of particular
interest in order to develop a critical sense and
deepen an understanding of past and current
work in this field. Seminars only.

BIOL 462 *Immunology* (3 credits)
Prerequisite: BIOL 266, 367. The role of the immune system in maintenance of body homeostasis will be presented with particular reference to cells and tissues of the immune system, their organization as well as their structural and functional relationships. Topics include: maturation and differentiation of B and T lymphocytes; structure and properties of antibodies; immune responses to antigens; genetic aspects of antibody synthesis; immunological considerations in AIDS, cancer, and autoimmune diseases. Lectures and seminars.

BIOL 464 Advanced Cell Biology (3 credits)

Prerequisite: BIOL 266, 367. Lectures dealing with selected topics in mammalian cell biology. These include introduction to the elements of cell culture with reference to the growth and function of non-differentiated and differentiated cells, control of cell cycling under normal and abnormal states, mechanisms of peptide and steroid hormone action with emphasis on intracellular signalling pathways, the control of gene transcription and detailed analysis of the effect of host cell factors on virus replication. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 465 Biological Regulatory Mechanisms (3 credits)

Prerequisite: BIOL 261; CHEM 271; or permission of the Department. The molecular basis of the control of metabolic pathways, with an emphasis on procaryote systems. The course concentrates on the analysis of the rationale of experimentation used to elucidate these regulatory mechanisms. Lectures and conferences.

BIOL 466 Advanced Laboratory in Molecular Biology (3 credits)

Prerequisite: BIOL 367, 368. Theory and practice of modern experimental procedures of molecular biology, including use of restriction enzymes, gene cloning, hybridizations, DNA sequencing, site-directed mutagenesis, and the use of bacteria and phage in biotechnology. Laboratory and tutorials.

NOTE: Students who have received credit for CHEM 479 may not take this course for credit.

BIOL 468 Gene Structure (3 credits)
Prerequisite: BIOL 367. This course deals with
gene regulation in eukaryotes. Topics covered
include transcription, transcript processing,
translation, and post-translational processes.
Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 469 DNA Repair (3 credits)

Prerequisite: BIOL 367. This course deals with the chemical alterations arising spontaneously in DNA during semi-conservative replication and as a result of exposure to ionizing radiation, ultraviolet radiation, and genotoxic chemicals. The repair of DNA damage by various enzymatic processes in both prokaryotic and eukaryotic cells is discussed. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 470 *Microbial Physiology* (3 credits) Prerequisite: BIOL 225, 226; CHEM 271. Comparative biochemistry of procaryotes — a

study of the biochemical activities underlying the life of micro-organisms. A description of the diverse biochemical adaptations used by micro-organisms to obtain energy and building materials from their various environments. Lectures and tutorials.

BIOL 471 Mechanism of Protein Synthesis (3 credits)

Prerequisite: BIOL 367. Cells synthesize many different proteins containing different sequences of amino acids. Synthesis of proteins is carried out by ribosomes (composed of proteins and RNA) and a variety of protein and RNA molecules that interact with the ribosome. The translation of the nucleotide sequence of a messenger RNA into the amino acid sequence of a protein involves over one hundred different proteins and RNA molecules. This course discusses current research on protein synthesis. Specific topics include the structure and function of ribosome and the other proteins and RNAs involved in translation, quality control in protein synthesis (translational accuracy), and the mechanisms of various types of programmed "errors" in translation. Lectures only. NOTE: Students who have received credit for BIOL 498V may not take this course for credit.

BIOL 483 Animal Physiology II (3 credits)
Prerequisite: BIOL 383; BIOL 387 recommended.
This course is a continuation of BIOL 383 and includes the study of mechanisms by which activities of major organ systems are coordinated and regulated in vertebrates, especially humans. Topics covered include blood, cardiovascular systems, respiration, water-electrolyte regulation, digestion, and metabolism. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 384 may not take this course for credit.

BIOL 490 Independent Study (6 credits) Prerequisite: Sixty (60) credits in an Honours or Specialization programme in Biology, and permission of the Department. In this course, the student undertakes a special research project selected in consultation with, and conducted under, the supervision of a faculty member of the Department. The project is intended to develop the student's knowledge of standard scientific procedures, including methods of researching scientific literature, the planning and execution of experimental and analytical procedures, the writing of a formal report, and the presentation of a seminar on the project. NOTE: Students may register in September or January for this course, but work must continue over two consecutive semesters.

BIOL 498 Advanced Topics in Biology (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.050 CHEMISTRY AND BIOCHEMISTRY

Faculty

JOHN A. CAPOBIANCO, Professor

Professor Emeritus MARK DOUGHTY

Professors PETER H. BIRD ANN ENGLISH MARY JUDITH KORNBLATT

Associate Professors **GEORGE DENES** PAUL JOYCE MARCUS F. LAWRENCE RAYMOND LE VAN MAO JUSTIN B. POWLOWSKI JOANNE TURNBULL

Assistant Professors **CAMERON SKINNER** TIMOTHY A. GADOSY DAVID JACK **GILLES PESLHERBE** SEBASTIEN ROBIDOUX

Adjunct Professors THOMAS J. ADLEY MARY BALDWIN IRENA EKIEL **BHUVAN PANT** DOROTHY POCOCK ROBIN T.B. RYE OSWALD S. TEE

Location

Sir George Williams Campus Hall Building, Room: H 1139 (514) 848-3366

Department **Objectives**

Chemistry is the science that examines the structure of substances and the reactions to produce novel and useful products. Biochemistry is that part of chemistry which deals with chemical changes occurring in biologically relevant systems; i.e. changes taking place in living cells that are responsible for life processes.

The mission of the Department is fourfold: (i) excellence in teaching and research in the fields of chemistry and biochemistry; (ii) develop and maintain strong undergraduate and graduate teaching programmes; (iii) develop and maintain state-of-the-art quality research; and (iv) meet the high standards of the scientific and industrial communities. Our programmes have strength in both the applied and the theoretical fields.

Programmes

Students are responsible for satisfying their particular degree requirements. All students are advised to include a course in a computer language in their degree programme. The Order of Chemists of Québec has fully accredited the curricula of i) Honours in Chemistry; ii) Honours in Biochemistry; iii) Specialization in Biochemistry; iv) Specialization in Chemistry. Upon satisfactory completion of any of the above-mentioned programmes, a graduate is eligible for membership in the Order. A working knowledge of French is required. Students should note that CHEM 450 has a performance prerequisite and is essential for Honours programmes. CHEM 419 has a performance prerequisite for the Specialization programmes. Students who cannot meet these prerequisites will not be able to complete the programmes but may complete a Major. For more details, students should consult with the Department. Courses that consist of both laboratories and lectures require that a satisfactory performance be obtained in each of the components for successful completion of the course. The superscript indicates credit value.

Core Component for Chemistry CHEM 217³, 218³, 221³*, 222³*, 234³, 235³, 241³, 242³, 271³, 312³, 324³, 325³, 333³, 341³, 393³

*For cégep equivalents these courses must be replaced with an equivalent number of other Organic Chemistry credits.

Core Component for Biochemistry BIOL 261³, 266³, 364³, 368³; CHEM 217³ 218³, 221^{3*}, 222^{3*}, 234³, 235³, 241³, 271³, 324³, 335³, 375³, 393³

*For students entering with the cégep equivalents,

these credits must be replaced with an equivalent number of other Organic Chemistry credits (for students in the Specialization or Honours) or with an equivalent number of credits in Chemistry or related disciplines, as approved by the departmental adviser (for students in the Major).

BSc Honours in Chemistry

An Honours in Chemistry programme consists of completion of the requirements of the Specialization in Chemistry with the election of CHEM 450⁶ as the senior research project. NOTE: Students must meet the University

regulations concerning the Honours degree. Honours students are encouraged to attend departmental seminars.

60 BSc Honours in Chemistry

- 45 Core component for Chemistry
- 3 CHEM 495³
- 12 Additional credits in Chemistry which must include CHEM 450⁶

72 BSc Honours in Biochemistry

- 48 Core component for Biochemistry
- 3 CHEM 477³ or BIOL 466³
- 15 CHEM 312³, 325³, 450⁶; BIOL 367³
- 6 Credits of 400-level courses in the Biochemistry area (CHEM 470³, 471³, 472³, 478³, 481³, and when appropriate, CHEM 498³); three credits may be replaced by a 400-level course in Cell and Molecular Biology (BIOL 441³, 461³, 462³, 464³, 465³, 468³, 469³, 470³, and when appropriate, BIOL 498³).

NOTE: Students must meet the University regulations concerning the Honours degree. Honours students in second year and beyond are encouraged to attend departmental seminars.

60 BSc Specialization in Chemistry

- 45 Core component for Chemistry
- 3 CHEM 495³
- 12 Additional credits in Chemistry, which must include *CHEM 419⁶

*With departmental permission, the student may substitute CHEM 450° for CHEM 419°.

69 BSc Specialization in Biochemistry

- 48 Core component for Biochemistry
- 15 CHEM 312³, 325³, 477³; BIOL 367³, 466³

6 Credits of 400-level courses in the Biochemistry area (CHEM 470³, 471³, 472³, 478³, 481³, and when appropriate, CHEM 498³); three credits may be replaced by a 400-level course in Cell and Molecular Biology (BIOL 441³, 461³, 462³, 464³, 465³, 468³, 469³, 470³, and when appropriate, BIOL 498³).

45 BSc Major in Chemistry

45 Core component for Chemistry Substitution of courses from within the Core programme by other courses in Chemistry or related disciplines (Mathematics, Physics, Biology, Geology) up to a maximum of nine credits, will be accepted, if previously approved by a departmental programme adviser. It is expected that such substitutions will be in accord with the overall programme of study being followed by the student.

48 BSc Major in Biochemistry

48 Core component for Biochemistry *For students with cégep equivalents, these may be replaced by an equivalent number of credits in Chemistry or related disciplines, as approved by the departmental adviser.

24 Minor in Chemistry

24 Chosen from the Department's offerings, with due regard to prerequisites, such that the courses chosen form a coherent pattern which complements the student's other areas of study. The course pattern chosen must have been previously approved by a departmental programme adviser.

Chemistry and Biochemistry Co-operative Programme Director

MARCUS F. LAWRENCE, Associate Professor

The Chemistry and Biochemistry Co-operative programme is offered to students who are enrolled in the BSc Honours or Specialization in Chemistry and Biochemistry. Students interested in applying for the Chemistry and Biochemistry co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education, in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Chemistry and Biochemistry co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

A student may be exempted from one or more of the introductory courses, on the basis of work done at the cégep level. Where exemptions are given, replacement courses must be chosen with the approval of a department adviser. In the case of certain programmes approved by the Order of Chemists of Québec, the courses must be replaced with an equivalent number of credits in the same sub-discipline as the exemptions.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

CHEM 205 *General Chemistry I* (3 credits) Stoichiometry, states of matter, atomic structure,

electron structure of atoms, the periodic table, periodic properties, bonding, solids. Lectures

and laboratory.

NOTE: This course presumes a good grounding in secondary school mathematics. Students lacking such grounding or non-science students seeking only an awareness of chemistry are advised to enrol in CHEM 2083.

NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration.

CHEM 206 General Chemistry II (3 credits) Prerequisite: CHEM 205. Thermochemistry, solutions and their properties, equilibrium, ionic equilibrium, pH, buffers, kinetics, reaction mechanisms, other selected topics related to biochemistry, biology, and engineering. Lectures and laboratory.

NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration.

CHEM 208 Chemical Hazards in the Work Environment (3 credits)

An introduction to chemistry, chemical hazards, and the social history of chemistry. A study of toxicity, combustion, corrosion, explosives, radiation, and water-reactive materials in the work environment. The course concentrates on establishing the chemical vocabulary and concepts necessary to understand the social impact of chemistry in relation to occupational health and safety, fire-fighting, and environmental hazards. The necessary non-quantitative knowledge of chemistry is developed as the course unfolds. NOTE: This course is not a prerequisite for any Chemistry course. This course may not be taken for credit by science students.

CHEM 209 Discovering Biotechnology (3 credits)

The course begins with an exploration of the roles of genes and proteins in life processes. It then proceeds to an examination of the basic scientific principles behind manipulation of biological molecules to produce desired changes. Students are introduced to the specific applications of the technology to medicine, agriculture, and the environment. Economic and ethical issues raised by biotechnology are also examined. NOTE: This course is intended for non-scientists, and may not be taken for credit by Biochemistry or Biology students.

CHEM 212 Analytical Chemistry for **Biologists** (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Math 203 or MATH 205. Chemical equilibria and titrations, treatment of analytical data, introduction to spectroscopy. Lectures and laboratory. NOTE: This course may not be taken for credit by students registered in a Chemistry or Biochemistry programme.

CHEM 217 Introductory Analytical Chemistry I (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206;

cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. Precipitation methods and solubility products; activity, chemical equilibria and titration curves of neutralization and complexation systems; treatment of analytical data. Lectures and laboratory.

CHEM 218 Introductory Analytical Chemistry II (3 credits)

Prerequisite: CHEM 217. Chemical equilibria and titration curves of oxidation-reduction. precipitation, and non-aqueous systems; potentiometry and potentiometric titrations; introduction to spectroscopy with emphasis on molecular and atomic absorption spectroscopy, fluorescence spectroscopy. Lectures and laboratory.

CHEM 221 Introductory Organic Chemistry I (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206. Basic aspects of orbitals and their role in covalent bonding; delocalization of electrons. Alkanes: structure, nomenclature, isomerism, reactions. Introductory stereochemistry: enantiomers, diastereomers, conformers, Fischer and Newman projections, specification of chirality, E/Z isomerism. Conformations of cyclic compounds. Alkylhalides: S_N1; S_N2; E1; E2 reaction mechanisms. Free-radical reactions, organometallic compounds. Chemistry of alcohols, ethers, and related compounds. Chemistry of alkenes, alkynes, and dienes. Lectures and laboratory.

CHEM 222 Introductory Organic Chemistry II (3 credits)

Prerequisite: CHEM 221, or one semester cégep Organic Chemistry. Introduction to the use of IR and NMR spectroscopy for the identification of simple organic compounds. Benzene and aromatic compounds: aromaticity, electrophilic aromatic substitution, nucleophilic aromatic substitution, substituent effects. Chemistry of aldehydes and ketones: nucleophilic addition, oxidation, reduction, and condensation reactions, tautomerism. Chemistry of carboxylic acids and their derivatives: amines: basicity, reactions. Lectures and laboratory.

CHEM 234 Physical Chemistry I: Thermodynamics (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226: cégep Mathematics 103 or MATH 203: cégep Mathematics 203 or MATH 205. The properties of real gases; fugacities; first, second and third laws of thermodynamics; the Phase Rule; one- and two-component systems; real solutions, and partial molal properties. Lectures, problem assignments, and assigned readings. NOTE: Students who have received credit for CHEM 231 and 232 or 332 or for this topic under a CHEM 298 number may not take this course for credit.

CHEM 235 Physical Chemistry: Kinetics of Chemical Reactions (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206: cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. Mathematical treatment of experimental results; theories of reaction rates; unimolecular reactions; the steady-state approximation; factors influencing rates of reactions in solution; acid-base catalysis; catalysis by enzymes and the Michaelis-Menten mechanism; free-radical reactions; photochemical reactions; experimental methods and techniques. Lectures and laboratory.

NOTE: Students who have received credit for CHEM 331 or for this topic under a CHEM 298 number may not take this course for credit.

CHEM 241 Inorganic Chemistry I: Introduction to Periodicity and Valence Theory (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. The structure of the atom; the periodic table; properties of atoms, covalent bonding treatments including Lewis theory, valence shell electron pair repulsion theory of structure, valence bond and molecular orbital theory. Crystal field theory applied to the structure and properties of transition metal complexes. Bonding theories of metallic materials and semi-conductors. Lectures and laboratory.

CHEM 242 Inorganic Chemistry II: The Chemistry of the Main Group **Elements** (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. A survey of the properties and reactions of: hydrogen; Group 1, lithium to cesium; and Group 2, beryllium to radium; including the theory of ionic bonding and structure. The descriptive chemistry of Group 13, boron to thallium; Group 14, carbon to lead; Group 15, nitrogen to bismuth; Group 16, sulphur to polonium; Group 17, the halogens; and Group 18, the chemistry of the noble gases. Lectures and laboratory.

CHEM 271 Biochemistry I (3 credits)

Prerequisite: CHEM 221; CHEM 222 previously or concurrently. An introduction to the essentials of biochemistry: protein structure, enzymology, carbohydrate metabolism, electron transport, integration and regulation of metabolism. Lectures, tutorials and laboratory. NOTE: Students who have received credit for CHEM 371 or CHEM 372 or CHEM 373 may not take this course for credit.

CHEM 298 Selected Topics in Chemistry

(3 credits)

CHEM 299 Selected Topics in Chemistry

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CHEM 312 Intermediate Analytical Chemistry (3 credits)

Prerequisite: CHEM 217; CHEM 218. A continuation of CHEM 217 and 218, with emphasis on instrumental methods of analysis. Emission spectroscopy; X-ray spectroscopy; voltammetry and polarography; amperometric titrations; coulometry and coulometric titrations, conductometry; chromatography with particular emphasis on gas chromatography, and high performance liquid chromatography. Laboratory is taken concurrently and provides experience in analytical techniques described in lectures. Lectures and laboratory.

NOTE: Students who have received credit for any of CHEM 310, CHEM 314, CHEM 315, or CHEM 319, may not take this course for credit.

Organic Chemistry III: Organic **CHEM 324** Reactions (3 credits)

Prerequisite: CHEM 222, or equivalent; CHEM 235 previously or concurrently. A mechanistic survey of reactions of major synthetic utility. Determination of reaction mechanisms. Importance of reactive intermediates: carbocations, carbanions, radicals, and carbenes. Lectures and laboratory. NOTE: Students who have received credit for CHEM 322 may not take this course for credit.

CHEM 325 Organic Chemistry IV: Organic Structure and Stereochemistry

(3 credits)

Prerequisite: CHEM 222, or equivalent. Organic structure and stereochemistry including the relationship of stereochemistry to physical properties and chemical reactivity. Determination of organic structure and stereochemistry by chemical and spectroscopic means. Identification of organic compounds (principally in the laboratory section). Lectures and laboratory. NOTE: Students who have received credit for CHEM 321 may not take this course for credit.

Natural Products (3 credits) CHEM 326 Prerequisite: CHEM 324 previously or concurrently. The structures, mechanisms of action, and biosynthetic origins of biologically important compounds such as fatty acids, polyketides, terpenes, steroids, alkaloids, and beta-lactam antibiotics are discussed. The role of traditional organic chemistry in the development of modern biochemistry and biotechnology is illustrated with examples from medicine and agriculture. Lectures only.

CHEM 327 Organic Chemistry of Polymers (3 credits)

Prerequisite: CHEM 222, or equivalent. Introduction to the fundamental aspects of polymers and polymerization. Methods of preparation, reaction mechanisms of polymer synthesis including condensation polymerization; addition polymerization: free radical, anionic, cationic; Ziegler-Natta (heterogeneous) polymerization. Lectures and problem sessions.

CHEM 333 Introduction to Quantum Theory (3 credits)

Prerequisite: CHEM 234. The course introduces students to the concept of quantum mechanics and the electronic structure of atoms and molecules. Topics include the origins and postulates of quantum theory, the Schrodinger equation and applications to simple systems such as the harmonic oscillator, rigid rotor and the hydrogen atom. The course looks at the quantum mechanical treatment of the chemical bond: molecular orbital theory, the description of electronic energy levels of simple molecules, the population of these levels and associated transition probabilities. Lectures only.

NOTE: Students who have received credit for CHEM 233 may not take this course for credit.

CHEM 334 Physical Chemistry: Laboratory (3 credits)

Prerequisite: CHEM 235. A series of experiments illustrating modern techniques for the examination of solids, liquids, and gases. Some experiments may include the automated collection and computerized analysis of data. Laboratory only.

CHEM 335 Biophysical Chemistry (3 credits)

Prerequisite: CHEM 235, 271. This course examines physical techniques used to study the structure of biological macromolecules such as absorption, fluorescence and circular dichroism spectroscopy, mass spectrometry, x-ray crystallography, NMR spectroscopy, calorimetric and relaxation techniques. Lectures and laboratory.

CHEM 341 Inorganic Chemistry III: The Transition Metals (3 credits)

Prerequisite: CHEM 217; CHEM 218; CHEM 241; CHEM 242. Theories of bonding in transition metal complexes, including ligand field theory, applied to structure, physical properties, and reactivity of transition metal complexes: organometallic chemistry and catalysis. Metals in biological systems. Lectures and laboratory.

CHEM 375 Biochemistry II (3 credits)
Prerequisite: CHEM 222; CHEM 271; CHEM 217
or CHEM 212. A survey of selected pathways in
intermediary metabolism, including their regulation
and physiological significance, lipid, amino acid
and nucleoside metabolism, cholesterol biosynthesis, urea cycle and the biochemistry of
protein synthesis. Lectures and laboratory.

CHEM 393 Spectroscopy and Structure of Organic Compounds (3 credits)

Prerequisite: CHEM 218, 222. This course examines the identification of organic compounds using methods based on electronic, vibrational, nuclear magnetic resonance and mass spectroscopies. In each case, there is an introduction to the principles of the spectroscopy and a discussion of how its spectra vary with structure. Particular emphasis is placed upon the UV-visible spectra of conjugated molecules; the identification of functional groups by IR spectroscopy; the use of NMR spectroscopy, including 2D methods, for the determination of stereochemistry; and the use of mass spectrometry for ascertaining molecular constitution. The use of computer simulation and information retrieval for structure determination is introduced. Lectures and laboratory. NOTE: Students who have received credit for CHEM 328 may not take this course for credit.

CHEM 398 Selected Topics in Chemistry (3 credits)

CHEM 399 Selected Topics in Chemistry (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CHEM 413 Advanced Bioanalytical Chemistry (3 credits)

Prerequisite: CHEM 312. Analytical chemistry of biomolecules. Topics include spectroscopic methods for quantitating total protein, nucleic acids, carbohydrates, and fatty acids; enzyme units, kinetics, assays for enzyme activities, use of enzymes for substrate/inhibitor assays; immobilized enzymes; antibody structure and assays based on secondary antibody-antigen reactions; labelled-binding immunoassays; biosensors; principles of electrophoresis; isoelectric focusing; capillary electrophoresis; chromatography of biomolecules. Lectures only. NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 415 Analytical Separations (3 credits)

Prerequisite: CHEM 312. High performance liquid separations on an analytical (non-preparative) scale are surveyed. Fundamental separation mechanisms and application of the techniques are discussed. Emphasis is placed on capillary electrophoretic separations of biologically relevant analytes which include peptides, proteins and nucleic acids. Lectures only. NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 419 Independent Study and Practicum (6 credits)

Prerequisite: Must have completed the 45-credit

Core programme, or equivalent, with a GPA of 2.00 (C) or better. In collaboration with and under the direction of a member of Faculty, the student carries out independent study and practical work on a problem chosen from the student's area of concentration. The student submits a written report on the results of the work and the report is scrutinized by a committee of members of the Department. NOTE: During the academic session before the one in which this project is to be undertaken, the student must have obtained the consent of the Department, by consultation with the CHEM 419 coordinator, and must have also been accepted by a faculty supervisor. Independent study and practical work.

CHEM 421 Physical Organic Chemistry (3 credits)

Prerequisite: CHEM 324 or CHEM 325; CHEM 235. Determination of organic reaction mechanisms using kinetics, activation parameters, acid-base catalysis, Bronsted catalysis law, solvent effects, medium effects, isotope effects, substitutent effects, and linear free energy relationships. Lectures only.

CHEM 424 Organic Synthesis (3 credits)
Prerequisite: CHEM 324. This course is
concerned with synthetic strategy and design.
Applications of modern synthetic methods and
reagents are exemplified by syntheses of
natural products, peptides, nucleic acids, and
novel chemotherapeutic agents. Lectures only.
NOTE: Students who have received credit for
CHEM 422 may not take this course for credit.

CHEM 442 Physical Methods in Inorganic Chemistry (3 credits)

Prerequisite: CHEM 341, CHEM 393 previously or concurrently. Introduction to symmetry and the character tables. Diffraction methods, X-ray, ESCA, UV-Visible, ORD and CD, EPR, Mössbauer, NQR, NMR, IR, and Raman. Lectures only.

CHEM 445 Industrial Catalysis (3 credits) Prerequisite: CHEM 234, 235. Basic and recent concepts in catalysis are described with particular emphasis on heterogenous catalysis. The technical, economic and environmental aspects of industrial catalysis are covered. The processes to be studied are chosen from the petroleum industry, the natural gas and coal processing industry, and the production of thermoplastics and synthetic fibres. The course ends with a rapid survey of problems associated with the treatment of industrial pollutants and with catalytic converters. Lectures only. NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 450 Research Project and Thesis (6 credits)

Prerequisite: Sixty credits including the 45-credit

Core programme, or equivalent and enrolment in Honours in Chemistry; or written permission of the Department. By departmental decision, such permission is only given if the student has a GPA of 3.00 or better, for all courses in this programme. The student works on a research project in the student's area of concentration, selected in consultation with and conducted under the supervision of a faculty member of the Department, and writes a thesis on the results. The project is also the subject of a seminar before the Department. NOTE: During the academic session before the one in which this project is to be undertaken, the student must have obtained the consent of the Department, by consultation with the CHEM 450 coordinator, and must have also been accepted by a faculty supervisor.

CHEM 470 Environmental Biochemistry (3 credits)

Prerequisite: CHEM 271, 375; BIOL 367; or permission of the Department. This course examines the biochemical effects of environmental stresses on organisms, and adaptations that allow organisms to face these stresses. Emphasis is placed on biochemical responses to toxic compounds such as aromatics, halogenated aliphatics, drugs, and heavy metals. Other topics may include adaptations to stresses such as temperature extremes, pathogens, and ionizing radiation. Applications to related biotechnological processes are also considered. NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 471 Enzyme Kinetics and Mechanism (3 credits)

Prerequisite: CHEM 271; 60 credits. Steadystate kinetics, including the use of initial velocity studies and product inhibition to establish a kinetic mechanism; nonsteady-state kinetics, isotope effects, energy of activation, etc; detailed mechanisms of selected enzymes. Lectures only.

CHEM 472 Chemical Toxicology (3 credits)
Prerequisite: CHEM 271. Introduction to the
general principles of toxicology with emphasis
on the toxic effects of chemicals in humans.
Dose-response relationship, types and routes of
exposure, absorption and disposition of toxic
substances, toxicokinetics, types of toxic
response, and factors affecting toxic response.
Toxicity testing, risk assessment, and interpretation of toxicological data. Lectures only.
NOTE: Students who have received credit for
this topic under a CHEM 498 number may not
take this course for credit.

CHEM 477 Advanced Laboratory in Biochemistry (3 credits)

Prerequisite: CHEM 375; BIOL 368. Theory and practice of techniques in enzymology and

protein chemistry, including steady-state and stopped-flow enzyme kinetics, ligand binding, immunological techniques, computer modelling, identification of groups at the active site. Lectures and laboratory.

Hormone Biochemistry **CHEM 478** (3 credits)

Prerequisite: CHEM 375. This course deals with an in-depth study of the vertebrate hormones and involves a study of the precise chemical structure and properties of each hormone, its biosynthesis and mode of secretion from the cell. The circulating form of the hormone is examined, as well as the nature of the hormone receptor. The cellular mechanism of action and the relationship of the hormone's action to the intact animal are investigated. Lectures only.

CHEM 481 Bioinorganic Chemistry (3 credits)

Prerequisite: CHEM 271; CHEM 241. Role of metals in biochemical systems. Essential trace elements, zinc enzymes, oxygen transport and storage, metalloproteins and biological electron transfer, structure-function relationships in heme enzymes, nitrogen fixation; model compounds for metalloproteins and metalloenzymes. Lectures only.

CHEM 493 Magnetic Resonance Spectroscopy (3 credits)

Prerequisite: CHEM 222, or equivalent. This course is designed to provide the background in magnetic resonance theory necessary to understand modern high-resolution NMR experiments and instrumentation. The basic theory in the introductory section also applies to electron spin resonance (ESR). Relaxation and through-bond and through-space interactions, and experiments to investigate them are considered. Spin

manipulations and behaviour in multiple-pulse, Fourier transform NMR techniques used for common spectral editing and two-dimensional experiments are discussed. Lectures only. NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 494 Mass Spectrometry (3 credits) Prerequisite: CHEM 235. Production and interpretation of mass spectra. Topics include: ionization methods (electron impact, chemical ionization and fast-atom bombardment); interpretation of mass spectra; introduction to quantitative analysis by mass spectrometry. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 495 Modern Spectroscopy (3 credits)

Prerequisite: CHEM 333. This course demonstrates how quantum theory applies to the measurement of absorption and emission spectra of atoms and molecules. The course examines rotational, vibrational, and electronic spectroscopy. Photoelectron and related spectroscopies. Lasers and laser spectroscopy. Lectures and laboratory.

CHEM 498 Advanced Topics in Chemistry (3 credits)

CHEM 499 Advanced Topics in Chemistry (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.060

CLASSICS, MODERN LANGUAGES AND LINGUISTICS

Faculty

Chair CATHERINE VALLEJO, Associate Professor (Spanish)

Professor

LIONEL J. SANDERS (Classics)

Associate Professors M. CATHERINE BOLTON (Classics) ANTHONY COSTANZO (Italian) HELMUT FAMIRA (German)

MARK HALE (Linguistics) FILIPPO SALVATORE (Italian) HERFRIED SCHEER (German) ANNETTE TEFFETELLER (Linguistics) BRUNO VILLATA (Italian)

Assistant Professors JANE E. FRANCIS (Classics) MARTHA NANDORFY (Spanish) CHARLES REISS (Linguistics) LADY ROJAS-TREMPE (Spanish)

Location

Sir George Williams Campus Hall Building, Room: H 663 (514) 848-2310

Department **Objectives**

Classics programmes have two related aims: first, to provide a broad and stimulating programme to students interested in exploring their cultural roots; secondly, to train specialists in reading and interpreting texts in ancient Greek and Latin.

In addition, through its commitment to teaching and research, the Department seeks to provide a stimulating intellectual milieu for learning languages and linguistics skills and theory, and for the humanistic and analytic study of literature.

Programmes

The Department of Classics, Modern Languages and Linguistics offers undergraduate programmes leading to the BA degree in Classics, German, Italian, Spanish, and Linguistics.

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

All these programmes can normally be completed within the regular three-year university sessions.

60 **BA Honours in Classics**

- Honours Core consisting of: 36
- Chosen from CLAS 2113, 2123, 3203, 9 330^{3}
- 6 CLAS 280⁶ or 290⁶
- CLAS 381³ and 382³, or 391³ and 392³
- Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- CLAS 261³ or 262³ 3
- Chosen from CLAS 266³, 267³, 353³, 364³, 365³, 369³ CLAS 450³, 451³

Concentration in Classical Languages and Literature

- 36 Honours Core
- CLAS 280⁶ or 290⁶
- CLAS 381³ and 382³, or 391³ and 392³ 6
- CLAS 410³ and 411³, or 420³ and 421³
- LING 330⁶, 431⁶, or other Linguistics courses chosen in consultation with the Department

Concentration in Classical Civilization

- Honours Core 36
- Chosen from CLAS 230³, 240³, 242³, 341³, 343³

- Chosen from CLAS 266³, 364³, 365³, 369³, 370³
- Chosen from CLAS 261³, 262³, 353³
- Credits in either Classics or another subject chosen in consultation with the Department

42 BA Major in Classics

- 18 Major Core consisting of:
- 9 Chosen from CLAS 2113, 2123, 3203, 3303
- 3 Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- 3 CLAS 261³ or 262³
- Chosen from CLAS 266³, 267³, 353³, 364³, 365³, 369³

Concentration in Classical Languages and Literature

- 18 Major Core
- CLAS 280⁶ or 290⁶
- 6
- CLAS 381^3 and 382^3 , or 391^3 and 392^3 CLAS 410^3 and 411^3 , or 420^3 and 421^3 6
- CLAS 280⁶ or 290⁶, or other Linguistics courses chosen in consultation with the Department

Concentration in Classical Civilization

- Major Core 18
- Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- 6 Chosen from CLAS 266³, 267³, 364³ 365³, 369³, 370³
- Chosen from CLAS 261³, 262³, 353³
- Credits in either Classics or another subject chosen in consultation with the Department

Minor in Classical Languages and Literature

- CLAS 2113, 2123, 3203, 3303
- 12 Chosen from 280⁶, 290⁶, 381³, 382³, 391³, 392³

Minor in Classical Civilization

- Chosen from CLAS 2113, 2123, 3203, 3303
- Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- 12 Chosen from CLAS 261³, 262³, 266³, 267³, 280⁶, 290⁶, 353³

24 Minor in Classical Archaeology

- CLAS 2663 3
- Chosen from CLAS 2303, 2403, 2423, 6 341³, 343³
- Chosen from CLAS 267³, 364³, 365³, 369³, 9
- Credits in either Classics or another subject chosen in consultation with the Department

BA Honours in German* 60

- GERM 240⁶, or 241³ and 242³ 6
- credits selected from courses with numbers higher than 242, of which 15 credits must be from GERM 400⁶ and above.
- 6 GERM 452⁶
- 3 GERM 490³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

*Admission suspended for 2000-01.

BA Honours in Italian

- ITAL 240⁶, or ITAL 241³ and 242³, or ITAL 2533 and 2543
- 12 ITAL 301³, 302³, 310³, 311³
- credits in an approved sequence chosen from any of the following: ITAL 2563, 2573, 3063, 3073, 3653, 3663 398³, 399⁶, 410³, 415³, 416³, 420³, 421³ 425³, 430³, 432³, 433³, 435³, 436³, 437³ 439³, 442³, 443³, 445³, 446³, 461³, 462³ 480³, 481³, 482³, 483³, 490³, 498³, 499⁶

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

BA Honours in Spanish

- SPAN 240⁶, or 241³ and 242³
- SPAN 301³, 302³, 304³, 403³ SPAN 362³, 363³, 365³ 12
- 3
- SPAN 490³ (Honours Essay Tutorial)

36 credits in an approved sequence chosen from any of the following: SPAN 3103, 3113, 3203, 3213, 3623 or 363³, 365³, 398³, 399⁶, 406³, 411³, 412³,

416³, 417³, 420³, 421³, 422³, 423³, 424³, 430³, 441³, 442³, 450³, 461³, 498³, 499⁶

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

60 **BA Specialization in Spanish**

- SPAN 240⁶, or 241³ and 242³ 6
- SPAN 256³, 257³
- SPAN 301³, 302³, 306³, 307³, 362³ or 363³, 365³, 370³
- 9 SPAN 401³, 461³, 464³
- credits chosen from: SPAN 310³, 311³, 320³, 321³, 362³ or 363³, 398³, 498³; LING 200⁶, 341³; or from courses in Hispanic literature at the 400 level, chosen in consultation with the Department.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in German

- 6 GERM 240⁶, or 241³ and 242³
- 30 credits selected from courses with numbers higher than 242, of which 12 credits must be from GERM 4006 and above.
- GERM 452⁶

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

BA Major in Italian

- ITAL 240^6 , or ITAL 241^3 and 242^3 , or ITAL 253^3 and 254^3
- ITAL 301³, 302³, 310³, 311³ 12
- credits from Italian courses numbered 256 and higher in a sequence approved by the Department.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

BA Major in Spanish - Literature

- SPAN 240⁶, or 241³ and 242³ 6
- SPAN 301³, 302³, 304³
- SPAN 362³, 363³, 365³
- credits in approved sequence chosen from any of the following: SPAN 310³, 311³, 320³, 321³, 398³ 399⁶, 403³, 406³, 411³, 412³, 416³, 417³, 420³, 421³, 422³, 423³, 424³, 430³, 441³, 442³, 450³, 461³, 498³, 499⁶

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in Spanish - Language

- 6 SPAN 240⁶, or 241³ and 242⁵
- 6 SPAN 256³, 257³
- 9 SPAN 301³, 302³, 370³
- 12 SPAN 362³ or 363³, 401³, 461³, 464³

9 credits in approved sequence chosen from any of the following: SPAN 306³, 307³, 310³, 311³, 320³, 321³, 362³ or 363³, 365³, LING 200⁶, 341³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in German

30 credits in German of which at least 12 credits are to be chosen from GERM 300⁶ and above.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in Italian

30 credits in Italian of which at least 18 credits must be chosen from ITAL 301 and above.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in Spanish

30 credits in Spanish chosen in consultation with the Department

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

60 BA Honours in Linguistics

A student entering an Honours programme in Linguistics will normally take the following courses:

- 18 LING 200⁶, 312⁶, 372³, 373³
- 18 LING 400³, 401³, 421⁶, 431⁶
- 12 LING credits chosen at the 300 and 400 level
- 12 LING credits, or 12 credits chosen in consultation with the Department from the following: Latin, Greek, Russian, German, Spanish, Italian, French, English, Portuguese, TESL, Sociology, Psychology, Philosophy

42 BA Major in Linguistics

- 15 LING 200⁶, 312⁶, 372³
- 21 LING credits chosen in consultation with the Department at the 300 and 400 level
- 6 credits in either Linguistics or another subject chosen in consultation with the Department

30 Minor in Linguistics

- 6 LING 200⁶
- 24 credits in Linguistics

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Classics

CLAS 211 Greek Literature (3 credits)
An introduction to the literature of ancient
Greece, this course focuses on Homer and the
epic cycle, the Homeric hymns, Hesiod and lyric
poetry, tragedy and comedy. The texts are read
in English translation.

CLAS 212 Roman Literature (3 credits)
An introduction to the major authors of the
Roman world, this course focuses on Catullus,
Virgil, Horace, Ovid and Lucretius; works of the
dramatists, orators and satirists may also be
included. The texts are read in English translation.

CLAS 230 (also listed as HIST 219) Ancient Near East (3 credits)

A political, social, economic, and intellectual history of the ancient Near East, this course surveys the period from the origins of civilization in the middle of the fourth millennium to Alexander the Great's conquest of the Persian Empire in the latter part of the fourth century B.C. NOTE: Students who have received credit for HIST 219 may not take this course for credit.

CLAS 240 (also listed as HIST 223) Greek History from the Bronze Age to Alexander (3 credits)

This course offers a political, social, economic,

and cultural history of Greece from the Minoan-Mycenaean period in the second millennium to the end of Classical Greek civilization in the fourth century B.C., with special emphasis placed upon Athens.

NOTE: Students who have received credit for HIST 223 may not take this course for credit.

CLAS 242 (also listed as HIST 225) History of the Roman Republic (3 credits)

This course offers a political, social, economic, and cultural history of Rome from the city's origins to the establishment of the Roman Empire under the Emperor Augustus.

NOTE: Students who have received credit for HIST 225 may not take this course for credit.

CLAS 261 Greek Mythology (3 credits)

A survey of the myths of ancient Greece and their characters — deities, heroes, mortals and monsters, this course examines the significance of the myths within their own time and their relevance for the modern world. Both literary and visual sources are used.

CLAS 262 Mythology of the Ancient Mediterranean (3 credits)

An examination of the common mythological themes of the ancient Mediterranean, this course focuses on the events, the characters,

and the significance of recurrent elements as found in the myths of Mesopotamia, Egypt, Greece, and Rome.

CLAS 266 An Introduction to Classical Archaeology (3 credits)

This course provides a general overview of the material remains of ancient Greece from the Bronze Age to the Hellenistic period. It addresses the function, context, dating, and meaning of artifacts, as well as methods of analysis.

CLAS 267 The Archaeology of the Greek **Bronze Age** (3 credits)

The Bronze Age in Mainland Greece, Crete, and the Greek Islands.

CLAS 280 Introductory Ancient Greek (6 credits)

The fundamentals of Greek grammar are presented in a course designed to enable the student to read the ancient authors as soon as possible.

CLAS 290 Introductory Latin (6 credits) The fundamentals of Latin grammar are presented in a course designed to enable the student to read the principal Roman authors as soon as possible.

CLAS 298 Selected Topics in Classics (3 credits)

CLAS 299 Selected Topics in Classics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CLAS 320 The Heroic Epics of Greece and Rome (3 credits)

Homer's Iliad and Odyssey and Virgil's Aeneid are considered in depth, with some attention given to other examples of epic, such as the Argonautica of Apollonius of Rhodes and Lucan's Pharsalia. Topics include epic as a genre, the nature of oral poetry, ethical values presented and the epic tradition and innovation. The texts are read in English translation.

Greek Drama (3 credits) **CLAS 330** Designed as an introduction to Greek drama from the origins of tragedy in the sixth century to New Comedy, this course consists of a detailed study of selected plays of Aeschylus, Sophocles, Euripides, Aristophanes and Menander. Also considered are Aristotle's Poetics and production techniques of the Greek theatre. The texts are read in English translation.

CLAS 341 (also listed as HIST 323) Greek History from Alexander to the Roman Conquest (3 credits)

A political, social, economic, and cultural history

of the Greek world from Alexander the Great to the Roman conquest of Greece in 146 B.C. NOTE: Students who have received credit for CLAS 241/HIST 224 or HIST 323 may not take this course for credit.

CLAS 343 (also listed as HIST 327) History of the Roman Empire (3 credits)

This course offers a political, social, economic, and cultural history of the Roman Empire from Augustus to the end of the Roman Empire in the West.

NOTE: Students who have received credit for CLAS 243/HIST 226 or HIST 327 may not take this course for credit.

CLAS 353 Representations of Women in Ancient Greece and Rome

(3 credits)

The ancient Greek and Roman representations of women are examined within their historical and cultural contexts. Focus is placed on the changing social roles, status and images of women in antiquity. Both visual and literary sources are used.

Classical Greek Art and **CLAS 364** Archaeology (3 credits)

An exploration of the monuments and artifacts of Classical Greece, ca. 680 to 380 B.C., this course concentrates on architecture, sculpture, vase painting, artistic production and methods of interpretation.

CLAS 365 Art and Archaeology of the Hellenistic Age (3 credits)

An investigation of the art and archaeology of the Hellenistic age from the death of Alexander in 323 to the mid-first century B.C., this course examines architecture, sculpture, mosaics, wall painting and the minor arts; emphasis is on the Roman influence on Greek art of the period.

CLAS 369 Roman Art and Archaeology (3 credits)

An introduction to the artifacts and monuments of Roman civilization from the sixth century B.C. through the Empire (third century A.D.), this course examines artistic styles, techniques, function, iconography and interpretation.

CLAS 370 Practicum in Archaeology (3 credits)

Prerequisite: Permission of the Department. This course is designed to give the student on-site fieldwork experience in either survey or excavation work. At least one month in the field is required.

Reading Greek Prose **CLAS 381**

(3 credits)

Prerequisite: CLAS 280 or equivalent. Prose works of authors such as Herodotus, Xenophon and Plato are read in the original Greek text. Attention is given to further study of grammatical and syntactical structures of the language. NOTE: Students who have received credit for CLAS 380 may not take this course for credit.

CLAS 382 Reading Greek Poetry (3 credits)

Prerequisite: CLAS 280 or equivalent. Selected works of the ancient poets are read in the original Greek text, with emphasis on Homer and Euripides. Attention is given to further study of the grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 380 may not take this course for credit.

Reading Latin Prose (3 credits) Prerequisite: CLAS 290 or equivalent. Prose works of authors such as Caesar, Cornelius Nepos, Cicero and Pliny are read in the original Latin text. Attention is given to further study of grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 390 may not take this course for credit.

CLAS 392 Reading Latin Poetry (3 credits) Prerequisite: CLAS 290 or equivalent. Selected works of the Roman poets are read in the original Latin text, with emphasis on Catullus, Ovid, Martial and Petronius. Attention is given to further study of grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 390 may not take this course for credit.

CLAS 398 Selected Topics in Classics (3 credits)

CLAS 399 Selected Topics in Classics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CLAS 410 Advanced Greek Prose (3 credits)

Prerequisite: CLAS 381 and 382, or equivalent. Works of the Greek historians, philosophers and orators are studied in depth. While authors read vary from year to year, the primary focus is on Herodotus, Thucydides, Plato or Demosthenes.

CLAS 411 Advanced Greek Poetry (3 credits)

Prerequisite: CLAS 381 and 382, or equivalent. Works of Greek epic, lyric or dramatic poetry are studied in depth. While authors read vary from year to year, the primary focus is on Homer, Aeschylus, Sophocles, Euripides or Pindar.

CLAS 420 Advanced Latin Prose (3 credits)

Prerequisite: CLAS 391 and 392, or equivalent. Works of the Roman historians, philosophers and orators are studied in depth. While authors

read vary from year to year, the primary focus is on Cicero, Sallust, Livy or Tacitus.

CLAS 421 Advanced Latin Poetry (3 credits)

Prerequisite: CLAS 391 and 392, or equivalent. Works of the Roman poets are studied in depth. While authors read vary from year to year, the primary focus is on Virgil, Ovid, Horace, Juvenal or Lucretius.

CLAS 450 Honours Seminar (3 credits) Prerequisite: Permission of the Department. The seminars focus on oral presentations by students. Topics vary from year to year.

CLAS 451 Honours Thesis (3 credits) Prerequisite: Permission of the Department. The student works with an individual faculty member in a particular area of archaeology, history or philology to produce an extensive research paper.

CLAS 498 Advanced Topics in Classics (3 credits)

CLAS 499 Advanced Topics in Classics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

German

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

GERM 200 Introductory German: Intensive Course (6 credits)

This course provides a comprehensive introduction to the German language, completing the fundamental aspects of grammar in one term. This course covers the same material as GERM 201 and 202.

NOTE: Students who have received credit for GERM 201 or 202 or 210 or 211 may not take this course for credit.

GERM 201 Introductory German I (3 credits)

This course provides an introduction to the basic elements of German for the student with no knowledge of the language.

NOTE: Students who have received credit for GERM 200 or 210 or 211 may not take this course for credit.

GERM 202 Introductory German II (3 credits)

Prerequisite: GERM 201. The objective of this course is to complete the study of fundamental

aspects of German grammar.

NOTE: Students who have received credit for

GERM 200 or 210 or 211 may not take this course for credit.

GERM 220 Speaking German (6 credits) The emphasis of this course is on speaking and understanding German. The course focuses on building vocabulary, developing basic conversational skills, and practising pronunciation.

GERM 240 Intermediate German: Intensive Course (6 credits)

Prerequisite: GERM 200 or 202. This course provides a review of German grammar in a single term and furnishes additional details not dealt with in the introductory courses. It covers the same material as GERM 241 and 242. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for GERM 250 or 251 may not take this course for credit.

Intermediate German I **GERM 241** (3 credits)

Prerequisite: GERM 200 or 202. This course provides a review of German grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition. NOTE: Students who have received credit for GERM 240 or 250 or 251 may not take this course for credit.

GERM 242 Intermediate German II (3 credits)

Prerequisite: GERM 241. This course is a continuation of GERM 241. It completes the review of the grammar and includes additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for GERM 240 or 250 or 251 may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 255 AND HIGHER WILL BE CONDUCTED IN GERMAN.

GERM 255 Translation I (6 credits) Prerequisite: GERM 200 or 202. This course is designed to expand the student's working knowledge of the German language through translation from German. The translation of a variety of texts provides a review of the basic grammar and further experience of idiomatic and syntactical structures.

GERM 270 German Composition and Conversation (6 credits)

Prerequisite: GERM 200 or 202 or 220. This course is designed to review and broaden the command of the German language through oral and written practice. The course focuses on the student's stylistic skills in written German and on the improvement of spoken German in everyday situations.

NOTE: Students who have received credit for

this topic under a GERM 299 number may not take this course for credit.

GERM 298 Selected Topics in German (3 credits)

GERM 299 Selected Topics in German (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GERM 300 Advanced German (6 credits) Prerequisite: GERM 240 or 242, and 255 or 270. This course is intended to give the student increased fluency in and a firmer command of the German language. The course focuses on advanced grammatical problems, syntactical structures, and the use of idioms in spoken and written German.

GERM 305 Translation II (6 credits) Prerequisite: GERM 240 or 242, and 255 or 270. This course is a continuation of GERM 255 and deals with advanced problems and techniques of translating into German. The translation of a variety of texts concentrates on linguistic analysis, on specialized vocabulary, and on idiomatic expressions.

GERM 360 German Civilization (6 credits) Prerequisite: GERM 240 or 242, and 255 or 270. This course is designed to acquaint the student with the intellectual and cultural history of German-speaking nations as reflected in their writers.

GERM 398 Selected Topics in German (3 credits)

Selected Topics in German **GERM 399** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GERM 400 German Literature from 800 to 1600 (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course provides a study of the main characteristics of the German literary periods up to A.D. 1600 through the reading of representative texts.

Literature of the Classic **GERM 410** Period (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course offers a study of German literature from the Enlightenment to Weimar Classicism (Goethe and Schiller) through the reading of representative works of different genres.

Literature of the Romantic **GERM 415** Period (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course presents a detailed study of German Romanticism through the reading of representative literary works.

GERM 420 German Literature of the Nineteenth Century (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course provides a study of representative works of German post-Romanticism, realism and naturalism.

GERM 425 German Literature from 1900 to 1950 (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course presents a study of German literature from the *fin de siècle* to the post-World War II period. A discussion of the literary works of German Expressionism, the literature of exile, and of National Socialist Germany is included.

GERM 430 Literature of the German-Speaking Countries since 1950 (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course deals with the literature of the German-speaking countries from 1950 to the present. The main characteristics of the literary trends developed in both East and West Germany until reunification, as well as in Austria and Switzerland, are examined through representative works.

GERM 435 History of the German Theatre (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course examines the development of German drama from its religious origins to its secular forms in modern theatre. Representative works of the genre are discussed.

GERM 450 German Poetry from the Middle Ages to Modern Times

(3 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course examines the development of German poetry from the Middle Ages to the present through the reading of representative texts.

GERM 452 German Literary Periods (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. In this course students undertake a comprehensive study of German literary periods from Old High German to the present. One major research paper is required.

NOTE: Students who have received credit for

NOTE: Students who have received credit for this topic under a GERM 499 number may not take this course for credit.

GERM 465 History of the German Language (6 credits)

Prerequisite: GERM 240 or 242, and 255 or 270. This course deals with the linguistic and historic development of the language from its Indo-European origins through Old and Middle High German to the standard language of today.

GERM 480 Tutorial I (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 481 Tutorial II (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 482 Tutorial III (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 483 Tutorial IV (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 490 Honours Essay Tutorial (3 credits)

Prerequisite: Honours status. This course provides the Honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the German section.

GERM 498 Advanced Topics in German

(3 credits)

GERM 499 Advanced Topics in German (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Hebrew

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

HEBR 210 Introductory Course in Hebrew (6 credits)

A beginners' course in Hebrew, with readings of classical and modern texts.

NOTE: Students who have taken Hebrew at the cégep level, or whose schooling has been conducted in Hebrew, will not be admitted to this course.

HEBR 211 Introductory Course in Hebrew B (3 credits)

A beginners' course in Hebrew, with readings of

classical and modern texts.

NOTE: Students who have taken Hebrew at the cégep level, or whose schooling has been conducted in Hebrew, will not be admitted to this course.

HEBR 250 Intermediate Hebrew (6 credits) Prerequisite: HEBR 210, or permission of the Department. This course will include a comprehensive review of Hebrew grammar and syntax with readings of classical and modern Hebrew texts.

HEBR 251 Intermediate Hebrew B (3 credits)

Prerequisite: HEBR 210, or permission of the Department. This course will include a comprehensive review of Hebrew grammar and syntax with readings of classical and modern Hebrew texts.

Italian

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

ITAL 200 Introductory Italian: Intensive Course (6 credits)

This course provides a comprehensive introduction to the Italian language, completing the fundamental aspects of grammar in one term. This course covers the same material as ITAL 201 and 202.

NOTE: Students who have received credit for ITAL 201 or 202 or 210 or 211 or 252 or 253 or 254 may not take this course for credit.

Introductory Italian I (3 credits) **ITAL 201** This course provides an introduction to the basic elements of Italian for the student with no knowledge of the language.

NOTE: Students who have received credit for ITAL 200 or 210 or 211 or 252 or 253 or 254 may not take this course for credit.

Introductory Italian II (3 credits) **ITAL 202** Prerequisite: ITAL 201. The objective is to complete the study of fundamental aspects of Italian grammar.

NOTE: Students who have received credit for ITAL 200 or 210 or 211 or 252 or 253 or 254 may not take this course for credit.

Intermediate Italian: Intensive **ITAL 240** Course (6 credits)

Prerequisite: ITAL 200 or 202. This course provides a review of Italian grammar in one term and deals with additional details not covered in the introductory course. It covers the same material as ITAL 241 and 242. Practice is provided through readings, discussions, and composition. NOTE: Students who have received credit for

ITAL 241 or 242 or 250 or 251 or 252 or 253 or 254 may not take this course for credit.

ITAL 241 Intermediate Italian I (3 credits) Prerequisite: ITAL 200 or 202. This course provides a review of Italian grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition. NOTE: Students who have received credit for ITAL 240 or 250 or 251 or 252 or 253 or 254 may not take this course for credit.

ITAL 242 Intermediate Italian II (3 credits) Prerequisite: ITAL 241. This course is a continuation of ITAL 241. It completes the review of the grammar and provides additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition. NOTE: Students who have received credit for ITAL 240 or 250 or 251 or 252 or 253 or 254 may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 253 AND HIGHER WILL BE CONDUCTED IN ITALIAN.

ITAL 253 Italian for Dialect Speakers I (3 credits)

This course is designed for speakers of Italian dialects who wish to acquire training in standard Italian. Emphasis is placed on grammar, lexicon, sentence structure, and other fundamentals of good usage. Both oral and written expression are emphasized.

NOTE: Students who have received credit for ITAL 200 or 201 or 202 or 240 or 241 or 242 or 252 may not take this course for credit.

ITAL 254 Italian for Dialect Speakers II (3 credits)

Prerequisite: ITAL 253. This course is a continuation of ITAL 253. It presents additional material not covered in ITAL 253 and provides practice through short readings, discussions, and composition.

NOTE: Students who have received credit for ITAL 200 or 201 or 202 or 240 or 241 or 242 or 252 may not take this course for credit.

Translation I (3 credits) Prerequisite: ITAL 200 or 202 or 254. This course provides a review of the Italian grammar and introduces students to the fundamentals of

NOTE: Students who have received credit for ITAL 255 may not take this course for credit.

Translation II (3 credits)

Prerequisite: ITAL 256. This course continues the review of Italian grammar begun in ITAL 256 and uses selected short texts for translation into

NOTE: Students who have received credit for ITAL 255 may not take this course for credit.

ITAL 298 Selected Topics in Italian

(3 credits)

ITAL 299 Selected Topics in Italian (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ITAL 301 Advanced Grammar and Composition I (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course is intended to give the student increased fluency in and a firmer command of the language. NOTE: Students who have received credit for ITAL 300 may not take this course for credit.

ITAL 302 Advanced Grammar and Composition II (3 credits)

Prerequisite: ITAL 301. This course is a continuation of ITAL 301. It provides students with further practice in advanced grammar and composition.

NOTE: Students who have received credit for ITAL 300 may not take this course for credit.

ITAL 306 Advanced Translation I (3 credits)

Prerequisite: ITAL 257. This course deals with idiomatic Italian usage and provides practice by means of translations into Italian of published material on a variety of topics.

NOTE: Students who have received credit for ITAL 305 may not take this course for credit.

ITAL 307 Advanced Translation II (3 credits)

Prerequisite: ITAL 306. This course is a continuation of ITAL 306. It deals with advanced problems and techniques of translation from Italian and into Italian.

NOTE: Students who have received credit for ITAL 305 may not take this course for credit.

ITAL 310 Survey of Italian Literature I (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course examines the major authors and trends of Italian literature from its origins to the end of the sixteenth century.

ITAL 311 Survey of Italian Literature II (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course examines the major authors and trends of Italian literature from the beginning of the seventeenth century to the present.

ITAL 365 Italian Civilization I (3 credits) Prerequisite: ITAL 240 or 242 or 254. This course provides a survey of Italy's cultural and scientific achievements until the end of the sixteenth century. Attention is given to Italy's social, political, and economic life.

NOTE: Students who have received credit for ITAL 360 may not take this course for credit.

ITAL 366 Italian Civilization II (3 credits) Prerequisite: ITAL 240 or 242 or 254. This course provides a survey of Italy's cultural and scientific achievements from the beginning of the seventeenth century to the present day. Attention is given to Italy's social, political, and economic life. NOTE: Students who have received credit for ITAL 360 may not take this course for credit.

ITAL 398 Selected Topics in Italian (3 credits)

ITAL 399 Selected Topics in Italian (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ITAL 410 Literary Criticism (3 credits) Prerequisite: ITAL 310 and 311. This course is a survey of literary criticism from the Renaissance to the present; outstanding examples of representative authors are studied in detail. Emphasis is placed on modern critical theories.

ITAL 415 Dante I: Earlier Works (3 credits)

Prerequisite: ITAL 240 or 242 or 254. In this course selected passages of Dante's earlier works are read and analysed.

ITAL 416 Dante II: Divina commedia (3 credits)

Prerequisite: ITAL 415. This course undertakes an analysis of the *Divina commedia*.

ITAL 420 Petrarch and Early Italian Poetry (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course examines selected works of the *Scuola siciliana* and the *Dolce stil nuovo*. Petrarch's *Canzoniere* is read and analysed.

ITAL 421 Boccaccio and the Novella (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course examines the origin and evolution of the early Italian novella. Emphasis is placed on the *Decameron*.

ITAL 425 Fifteenth-Century Prose and Poetry (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course deals with the rise of Humanism in Italy. Representative prose writings, chivalresque and lyric poetry, especially the lyric poetry of Poliziano and Lorenzo de' Medici, are read and analysed.

ITAL 430 The Italian Renaissance (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course is designed to acquaint the student with the Italian Renaissance, with emphasis on Machiavelli's *Principe* and *La mandragola*.

ITAL 432 Ariosto (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course undertakes the study of Orlando Furioso and some of Ariosto's minor works.

ITAL 433 Tasso and Epic Poetry (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course presents a study of the work of Tasso, with special emphasis upon La Gerusalemme liberata, within the context of Counter-Reformation Italy.

ITAL 435 Seventeenth Century Prose and Poetry (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course provides students with an opportunity to study representative scientific and literary texts. Emphasis is placed on Galileo, Sarpi, Marino, and Chiabrera.

ITAL 436 Eighteenth Century Prose and Poetry (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course examines selected philosophic and literary texts of Vico, Parini, and Alfieri.

ITAL 437 History of the Italian Theatre (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course provides a panoramic view of Italian theatre from its origins to the present. Emphasis is placed on Goldoni and Pirandello.

ITAL 439 Romanticism in Italy: The Early Nineteenth Century (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course examines the debate between neoclassicism and Romanticism and the link between Romanticism and the Risorgimento. Emphasis is placed on Monti, Foscolo, and Leopardi.

ITAL 442 Manzoni (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course undertakes a critical study of I promessi sposi and representative poetic and dramatic works of Manzoni.

ITAL 443 Nineteenth-Century Italian Literature after Manzoni (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course provides a study of representative works of the later nineteenth century, with emphasis on writers such as Verga, Carducci, and Pascoli.

ITAL 445 Twentieth-Century Italian Literature to 1945 (3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course acquaints students with the major literary trends in Italy from the beginning of the twentieth century to 1945. Emphasis is placed on writers such as D'Annunzio, Pirandello, Deledda, Ungaretti, and Montale.

ITAL 446 Italian Literature from Neo-Realism to the Present

(3 credits)

Prerequisite: ITAL 240 or 242 or 254. This

course undertakes the critical study of representative literary works from the end of World War II to the present.

History of the Italian **ITAL 461** Language I (3 credits)

Prerequisite: ITAL 302. This course deals with the history of the Italian language from its origins to the end of the thirteenth century through the study of representative texts. Some attention is given to the other Romance languages. NOTE: Students who have received credit for ITAL 460 may not take this course for credit.

ITAL 462 History of the Italian Language II (3 credits)

Prerequisite: ITAL 302. This course deals with the history of the Italian language from the beginning of the fourteenth century to the present day through the study of representative texts. Some attention is given to the other Romance languages and to Italian dialects. NOTE: Students who have received credit for ITAL 460 may not take this course for credit.

ITAL 480 Tutorial I (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 481 Tutorial II (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 482 Tutorial III (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 483 Tutorial IV (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 490 Honours Essay Tutorial (3 credits)

Prerequisite: Honours status. This course provides the Honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the Italian section.

ITAL 498 Advanced Topics in Italian

(3 credits)

ITAL 499 Advanced Topics in Italian

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Linguistics

LING 200 Introduction to Linguistic Science (6 credits)

Introduction to the principles of general linguistics for beginners in the field. Basic phonology and morphology. Emphasis on synchronic linguistic analysis, with a brief examination of historical and comparative linguistics.

LING 298 Selected Topics in Linguistics (3 credits)

LING 299 Selected Topics in Linguistics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LING 300 Sociolinguistics (3 credits) Prerequisite: LING 200, or permission of the Department. A study of the beliefs, interrelationships, and values of societal groups as reflected in language.

LING 312 Theory of Grammars (6 credits)
Prerequisite: LING 200, previously or concurrently, or permission of the Department. This course deals with the history and development of grammatical theory prior to Chomsky. Considerable emphasis is placed on traditional grammar, the school of de Saussure, and Bloomfieldian structuralism. The principles of historical linguistics and the development of semantic theory and Meaning-Structure Grammar are also examined.

LING 320 Semantics (3 credits)

This course introduces the basic notions required for analysis of meaning within a theory of language. The central objective is the representation of the logical structure of natural language as a basis for explaining how competent users interpret words, phrases, and sentences. Readings focus on elements of grammatical structure, lexical content, and the context of utterance. Some contemporary works in linguistic semantics are critically examined.

LING 330 Sanskrit (6 credits)

Prerequisite: LING 200, previously or concurrently, or permission of the Department. An accelerated introduction to the fundamentals of Sanskrit grammar through the extensive reading of texts, first in transliteration and later in devanāgarī. Particular attention is given to the language of the Rig-Veda.

LING 341 Introduction to Romance Linguistics (3 credits)

A study of the modern Romance languages, especially French, Italian, and Spanish, and their development from Latin.

NOTE: Students who have received credit for LING 441 may not take this course for credit.

LING 372 Descriptive and Instrumental Phonetics (3 credits)

Description of speech sounds in articulatory terms. Identification and description of sounds that occur outside the Indo-European family of languages. Description of speech sounds as to their acoustic qualities: frequency, amplitude, pitch, stress. Interpretation of sound spectrograms.

LING 373 Phonological Analysis (3 credits)

Prerequisite: LING 200 and/or 372, or permission of the Department. The fundamentals of distinctive-feature analysis as developed by Jakobson, Chomsky, and Halle. Theoretical concepts and notational techniques are emphasized. Extensive training in data analysis and rule writing.

LING 398 Selected Topics in Linguistics (3 credits)

LING 399 Selected Topics in Linguistics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LING 400 Theory of Generative Grammar I (3 credits)

Prerequisite: LING 200 and 312. Chomsky's extended standard theory. Phrase-markers and phrase-structure rules; x-bar syntax; the lexicon; WH-movement, though-movement, topicalization, and VP-preposing.

LING 401 Theory of Generative Grammar II (3 credits)

Prerequisite: LING 400, or equivalent. Subject raising; reflexive interpretation; structure-preserving, trace, and cyclic principles; constraints; fillers; the binding theory and current developments.

LING 421 Non-Indo-European Structures (6 credits)

Prerequisite: LING 200, or permission of the Department. This course is intended to give the student an in-depth acquaintance with the structures of several languages differing markedly in their nature from Indo-European. Possible areas of study might be Eskimo, Finnish, Japanese, Swahili, Turkish, some Amerindian or Malayo-Polynesian language, etc. As a general rule, only four languages are investigated in a particular year.

LING 431 Comparative Indo-European Linguistics (6 credits)

Prerequisite: LING 200, or permission of the

Department. Through a comparative study of the phonology of the various branches of the Indo-European language family (Indo-Iranian, Hellenic, Italic, Germanic, Slavic, Baltic, etc.), this course familiarizes the student with the techniques used in linguistic reconstruction. Emphasis is given to the development and differentiation of languages through time.

LING 436 Advanced Indo-European **Studies** (3 credits)

Prerequisite: LING 431, previously or concurrently. Detailed study of the synchronic and diachronic grammar of an Indo-European dialect essential to the reconstruction of the protolanguage. Extensive readings are undertaken in both original texts and in scholarly contributions to their elucidation. Emphasis is placed on current issues and research in the field.

LING 437 Problems in Indo-European Comparative Grammar (3 credits)

Prerequisite: LING 431, previously or concurrently. This course explores one or more areas of Indo-European comparative grammar of particular interest in current research. Extensive reading in the scholarly literature is undertaken with emphasis on the principles by which hypotheses in historical linguistics can be framed and the criteria for testing such hypotheses.

LING 446 Comparative Grammar of Greek and Latin (3 credits)

Prerequisite: LING 200 or CLAS 280 or 290. A study of the similarities and differences in the phonology and morphology of Ancient Greek and Latin. Some attention is also given to issues of syntax and the lexicon.

I ING 447 Mycenaean Greek (3 credits) Prerequisite: LING 200 or CLAS 280. Dating from the fourteenth to the twelfth century BCE, Mycenaean — the language of the Linear B tablets — is the earliest form of Greek attested. In this course, selected documents will be read, both in transliteration and in the Mycenaean syllabary, with attention both to linguistic and to cultural issues.

NOTE: Students who have received credit for this topic under a LING 498 number may not take this course for credit.

LING 456 Homeric Greek (3 credits) Prerequisite: LING 200 or CLAS 280. An examination of the language of Homer, an artificial mixture of dialectal and diachronic variants, a Kunstsprache. Against the background of a study of the comparative and historical grammar of Greek and its development from Proto-Indo-European, the focus is on diachronic aspects of Homeric grammar and diction. Readings are principally from Books One and Three of the Iliad.

LING 457 Archaic Latin and the Italic Dialects (3 credits)

Prerequisite: LING 200 or CLAS 290. A study of inscriptions in archaic Latin and the ancient Italic dialects Oscan and Umbrian. Examination of the main features of phonology, morphology, syntax and the lexicon which distinguish Osco-Umbrian from Latin, with reference to their development from Proto-Indo-European.

LING 461 Hittite (3 credits)

Prerequisite: LING 330 or 431, previously or concurrently, or permission of the Department. The fundamentals of Hittite grammar are presented through the extensive reading of texts, both in transliteration and cuneiform. Considerable attention is given to problems of comparative grammar.

LING 498 Advanced Topics in Linguistics (3 credits)

LING 499 Advanced Topics in Linguistics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Modern Languages

The following courses give instruction in languages and cultures not normally covered by the Department. Any or all of them may be offered when a specific ethnic community has persuaded the University of its interest in seeing them put on, and of its willingness to support them.

MODL 298 Special Topics in Modern Languages (3 credits)

MODL 299 Special Topics in Modern Languages (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MODL 398 Special Topics in Modern Languages (3 credits)

MODL 399 Special Topics in Modern Languages (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MODL 498 Advanced Topics in Modern Languages (3 credits)

MODL 499 Advanced Topics in Modern Languages (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Portuguese

PORT 400 Portuguese Language and Literature (6 credits)

Prerequisite: SPAN 257, or equivalent, and any six credits at the 400 level in Spanish. A course designed for advanced Spanish language students. Readings in Portuguese begin as early as the second week of class.

NOTE: Students whose first language is Portuguese, or who have received a substantial part of their education in Portuguese, are not permitted to take this course for credit.

Russian

RUSS 330 The Structure of Russian

(6 credits)

Prerequisite: No previous knowledge of Russian required. An accelerated but thorough introduction to the grammatical structure of modern Russian. The emphasis is on reading. The course aims to provide students with the ability to read scholarly and literary prose with the aid of a dictionary. Intended primarily for students who need Russian as an aid to research and for students of Linguistics.

RUSS 400 Advanced Russian Grammar and Readings (6 credits)

Prerequisite: RUSS 330, or equivalent. This course is a continuation of RUSS 330. Further readings with emphasis on scientific and scholarly prose. Considerable attention is devoted to advanced points of grammar, vocabulary, stylistics, and translation.

Spanish

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

SPAN 200 Introductory Spanish: Intensive Course (6 credits)

This course provides a comprehensive introduction to the Spanish language, completing the fundamental aspects of grammar in one term. This course covers the same material as SPAN 201 and 202.

NOTE: Students who have received credit for SPAN 201 or 202 or 210 or 211 may not take this course for credit.

SPAN 201 Introductory Spanish I (3 credits)

This course provides an introduction to the basic elements of Spanish for the student with no knowledge of the language. NOTE: Students who have received credit for

SPAN 200 or 210 or 211 may not take this course for credit.

SPAN 202 Introductory Spanish II (3 credits)

Prerequisite: SPAN 201. The objective of this course is to complete the study of fundamental aspects of Spanish grammar.

NOTE: Students who have received credit for SPAN 200 or 210 or 211 may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 240 AND HIGHER WILL BE CONDUCTED IN SPANISH.

SPAN 240 Intermediate Spanish: Intensive Course (6 credits)

Prerequisite: SPAN 200 or 202. This course provides a review of Spanish grammar in a single term and furnishes additional details not dealt with in the introductory courses. It covers the same material as SPAN 241 and 242. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 241 or 242 or 250 or 251 may not take this course for credit.

SPAN 241 Intermediate Spanish I

(3 credits)

Prerequisite: SPAN 200 or 202. This course provides a review of Spanish grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition. NOTE: Students who have received credit for SPAN 240 or 250 or 251 may not take this course for credit.

SPAN 242 Intermediate Spanish II (3 credits)

Prerequisite: SPAN 241. This course is a continuation of SPAN 241. It completes the review of the grammar and includes additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 240 or 250 or 251 may not take this course for credit.

SPAN 256 Translation I (3 credits)

Prerequisite: SPAN 200 or 202. This course provides a review of Spanish grammar and introduces students to the principles of translation. NOTE: Students who have received credit for SPAN 255 may not take this course for credit.

SPAN 257 Translation II (3 credits)

Prerequisite: SPAN 256. This course continues the review of Spanish grammar begun in SPAN 256 and uses selected short texts for translation into Spanish.

NOTE: Students who have received credit for SPAN 255 may not take this course for credit.

SPAN 298 Special Topics in Spanish

(3 credits)

SPAN 299 Special Topics in Spanish (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Advanced Grammar and Composition I (3 credits)

Prerequisite: SPAN 240 or 242. This course is designed to help students understand some advanced aspects of Spanish grammar and to provide practice in the correct and effective writing of Spanish.

SPAN 302 Advanced Grammar and Composition II (3 credits)

Prerequisite: SPAN 301. This course continues the study of advanced aspects of Spanish grammar and provides practice in the correct and effective writing of Spanish by means of types of composition such as summary, description, narration, argumentation, and essay.

SPAN 304 Introduction to the Study of Hispanic Literature (3 credits)

Prerequisite: SPAN 240 or 242. This course introduces students to fundamental concepts necessary for the study of Hispanic literature. It deals with the relation between literature and other disciplines and presents some basic tools and techniques of research and criticism as related to Hispanic literature. Students are encouraged to take this course concurrently with SPAN 310 or 311 or 320 or 321.

NOTE: Students who have received credit for this topic under a SPAN 298 number may not take this course for credit.

Advanced Translation I **SPAN 306** (3 credits)

Prerequisite: SPAN 257. This course deals with idiomatic Spanish usage and provides practice by means of a number of translations into Spanish of published material on a variety of

NOTE: Students who have received credit for SPAN 305 may not take this course for credit.

Advanced Translation II **SPAN 307** (3 credits)

Prerequisite: SPAN 306. This course continues the practice of idiomatic Spanish through the translation into Spanish of published material on a variety of topics. Special attention is given to texts from the world of business.

NOTE: Students who have received credit for SPAN 305 may not take this course for credit.

SPAN 310 Survey of Spanish Literature I (3 credits)

Prerequisite: SPAN 240 or 242. This course provides a panoramic view of Spanish literature as produced in the Peninsula from the twelfth to the seventeenth century.

Survey of Spanish Literature II **SPAN 311** (3 credits)

Prerequisite: SPAN 240 or 242. This course provides a panoramic view of Spanish literature

as produced in the Peninsula from the eighteenth to the twentieth century.

SPAN 320 Survey of Spanish-American Literature I (3 credits)

Prerequisite: SPAN 240 or 242. This course provides a panoramic view of Spanish-American literature from the colonial period to the end of the nineteenth century.

Survey of Spanish-American **SPAN 321** Literature II (3 credits)

Prerequisite: SPAN 240 or 242. This course provides a panoramic view of Spanish-American literature of the twentieth century.

SPAN 362 Civilization of Mexico, the Central American Region and the Spanish Caribbean

(3 credits)

Prerequisite: SPAN 240 or 242. This course is designed to acquaint the student with the cultural achievements of the region within an historical framework. Emphasis is on Mexico and Cuba; the major achievements of the Dominican Republic, Venezuela, Colombia, and the Central American countries are highlighted. NOTE: Students who have received credit for SPAN 361 may not take this course for credit.

SPAN 363 Civilization of the Southern Cone and the Andean Region

(3 credits)

Prerequisite: SPAN 240 or 242. This course is designed to acquaint the student with the cultural achievements of the region within an historical framework. Emphasis is on Argentina, Peru, and Chile; the major achievements of Uruguay, Paraguay, Ecuador, and Bolivia are highlighted. NOTE: Students who have received credit for SPAN 361 may not take this course for credit.

SPAN 365 The Civilization of Spain (3 credits)

Prerequisite: SPAN 240 or 242. This course undertakes a study of important historical events and figures of Spain from the Middle Ages to the present. It also provides an introduction to Spanish arts and cultural achievements.

NOTE: Students who have received credit for SPAN 360 may not take this course for credit.

SPAN 370 Structure of the Spanish Language (3 credits)

Prerequisite: SPAN 240 or 242. This course provides an overview of the linguistic structure of the Spanish language. Topics include phonetics, morphology, syntax, and semantics. NOTE: Students who have received credit for this topic under a SPAN 398 number may not take this course for credit.

SPAN 398 Special Topics in Spanish

(3 credits)

SPAN 399 Special Topics in Spanish (6 credits)

Specific topics for these courses, and

prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SPAN 401 Effective Written Communication in Spanish (3 credits)

Prerequisite: SPAN 301. This course provides an opportunity for students to perfect their ability to write Spanish clearly and effectively for professional purposes, with encouragement of direct contact with Hispanic cultural institutions.

SPAN 403 Methods of Literary Analysis (3 credits)

Prerequisite: SPAN 304 or 311 or 321. This course presents the student with some of the fundamental concepts of twentieth century literary theory and criticism such as formalism, Marxism, structuralism, semiotics, psychoanalytical and feminist approaches. Practice in criticism is applied to Hispanic texts.

NOTE: Students who have received credit for SPAN 303 may not take this course for credit.

SPAN 406 Medieval Literature (3 credits)
Prerequisite: SPAN 310. This course examines
Castilian prose and poetry until about 1500.
Texts analysed include selections from El libro
de buen amor, La Celestina, as well as the
works of authors such as the Marqués de
Santillana, Juan de Mena, and Juan Boscán.
NOTE: Students who have received credit for
SPAN 407 may not take this course for credit.

SPAN 411 *Golden Age Prose* (3 credits) Prerequisite: SPAN 310. This course provides critical study of the novel and other narrative didactic genres of the sixteenth and seventeenth centuries through the analysis of representative works. Emphasis is on Cervantes' contribution to the novel.

SPAN 412 Golden Age Drama and Poetry (3 credits)

Prerequisite: SPAN 310. This course examines the development of Spanish verse drama of the sixteenth and seventeenth centuries through the analysis of representative authors such as Lope de Vega and Tirso de Molina. The work of non-dramatic poets such as Góngora is also considered.

NOTE: Students who have received credit for SPAN 413 may not take this course for credit.

SPAN 416 Peninsular Neoclassicism and Romanticism (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the literature of eighteenth-century neoclassicism and the rules of its art through a

study of representative authors, such as Jovellanos and Moratín. Nineteenth-century Romantic poetry and drama are studied through the works of representative authors such as Espronceda, Zorrilla, and Bécquer.

SPAN 417 Peninsular Realism and Naturalism (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the development of the novel during the Realist and Naturalist periods in Spain, through the analysis of representative authors such as Pardo Bazán, Clarín, Valera, and Pérez Galdós.

SPAN 420 The Generation of 1898 (3 credits)

Prerequisite: SPAN 240 or 242. Through a study of authors such as Unamuno, Baroja, Azorín, Machado, and Valle-Inclán, this course examines the Spanish crisis of 1898 and its issues, such as the Spanish national character and the Castilian landscape.

SPAN 421 Twentieth-Century Spanish Literature to the Civil War

(3 credits)

Prerequisite: SPAN 240 or 242. This course presents twentieth-century Spanish literature up to 1939. Special attention is given to García Lorca and the Group of 1927.

NOTE: Students who have received credit for

NOTE: Students who have received credit for SPAN 431 may not take this course for credit.

SPAN 422 Twentieth-Century Spanish Literature after the Civil War

(3 credits)

Prerequisite: SPAN 240 or 242. This course presents literature of the post-civil war period as well as some of the later "experimental" novels. NOTE: Students who have received credit for SPAN 431 may not take this course for credit.

SPAN 423 Twentieth-Century Spanish-American Literature before 1960 (3 credits)

Prerequisite: SPAN 240 or 242. This course examines the literary production in Spanish America during the first half of this century through representative works of some of the major writers of the era, such as Gallegos, Bombal, Borges, Neruda, and Azuela. NOTE: Students who have received credit for SPAN 432 may not take this course for credit.

SPAN 424 Twentieth-Century Spanish-American Literature from 1960 to the Present (3 credits)

Prerequisite: SPAN 240 or 242. This course examines the phenomenon of *el boom* in Spanish-American literature and its innovative aspects in authors such as García Márquez, Fuentes, Vargas Llosa, Rulfo, Puig, and Allende. *NOTE: Students who have received credit for SPAN 432 may not take this course for credit.*

SPAN 430 Women and Hispanic Literature (3 credits)

Prerequisite: SPAN 311 or 321 or 403. This course examines the relationship between women and literature in Spain and Spanish America, through issues such as the image of women in Hispanic literature, women as fictional characters, and women as writers. NOTE: Students who have received credit for SPAN 498C may not take this course for credit.

SPAN 441 Spanish-American Romanticism (3 credits)

Prerequisite: SPAN 240 or 242. This course examines the development of post-Independence literature of Spanish America until the end of the nineteenth century. Emphasis is placed on identifying distinctively Spanish-American literary traits within the Romantic context.

SPAN 442 Spanish-American Modernism and Vanquardism (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the stages of Modernism and Vanguardism through a study of representative works of authors such as Martí, Darío, Mistral, Neruda, and Paz.

SPAN 450 The Spanish-American Short Story (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the Spanish-American short story from the thematic, historical, and theoretical perspectives. Representative authors include Borges, Cortázar, Garcia Márquez, and Valenzuela. NOTE: Students who have received credit for SPAN 498G may not take this course for credit.

SPAN 461 History of the Spanish Language (3 credits)

Prerequisite: SPAN 310 or 370. This course provides a study of the development of the Spanish language from earliest times to the present. Consideration is given to the language in the Americas.

NOTE: Students who have received credit for this topic under a SPAN 498 number may not take this course for credit.

SPAN 464 Issues in Spanish-American Civilization (3 credits)

Prerequisite: SPAN 362 or 363. This course

examines the current status of the issues that have shaped Spanish-American culture, such as the native peoples' question, land reform, religious institutions, and the search for identity. It provides an opportunity for students to work in an Hispanic cultural context, as emphasis is placed on research projects that include interviews, oral presentations and reports.

SPAN 480 Tutorial I (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

SPAN 481 Tutorial II (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

Tutorial III (3 credits) **SPAN 482**

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

Tutorial IV (3 credits) **SPAN 483**

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

SPAN 490 Honours Essay Tutorial (3 credits)

Prerequisite: Honours status. This course provides the Honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the Spanish section.

SPAN 498 Advanced Topics in Spanish (3 credits)

SPAN 499 Advanced Topics in Spanish (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. 31.070

COMMUNICATION STUDIES

Faculty

Chair MARTIN ALLOR, Associate Professor

Professors Emeriti JOHN BUELL JOHN E. O'BRIEN, s.j.

Professors
WILLIAM BUXTON
MARC GERVAIS, s.j.
NIKOS METALLINOS

Associate Professors
MAURICE CHARLAND
W. LAMBERT GARDINER
RICHARD HANCOX
DENNIS MURPHY
CHANTAL NADEAU

LORNA ROTH KIM SAWCHUK DONAT J. TADDEO HAL THWAITES

Assistant Professors CHARLES ACLAND MONIKA KIN GAGNON ANDRA McCARTNEY

University Research Professor GAIL VALASKAKIS

Adjunct Professors ROBERT BABE WILLIAM GILSDORF KEVIN WILSON

Location

Loyola Campus

Bryan Building, Room: BR 111

(514) 848-2555

Department Objectives

The Communication Studies Department takes a broad approach to the study of media and communication. The aim is to develop the student's appreciation of the role played by the mass media in society. With the emphasis on a humanistic value-oriented assessment, the programme is designed to develop both the critical faculties and creative potential of students. Each programme has three components: a focus on humanities and liberal arts, a focus on social science and research, and a focus on creative laboratory work. These enable students to be thoroughly prepared for a wide range of career opportunities in the media industries, in public relations, and in government.

Facilities

The Department provides the necessary equipment and facilities to accommodate students in laboratory courses. These include: two television studios with editing facilities and field units, 16mm film equipment, a digital non-linear editing suite for film and video, and analog and digital sound facilities. There are two photography labs, a graphics lab, and a digital media laboratory. The Learning Centre houses audio, film, slide, video, and computer technology for independent study and classroom use.

Department Admission Requirements

The Department of Communication Studies has distinct admission procedures for each of its programmes, in addition to the normal admission process of Concordia University. The Department is prepared to receive applications as early as October. Interested candidates should obtain information about admission requirements of the Department's programmes by contacting the Admissions Committee, Department of Communication Studies, Loyola Campus, Concordia University, 7141 Sherbrooke Street West, Montréal, Québec, H4B 1R6.

Graduate Work in Communication Studies

The Department also offers a one-year diploma programme for students who have completed their undergraduate degree in another field, and an MA in Media Studies for those with two years of media experience and academic work in Communications. A PhD in Communications is offered jointly with Université de Montréal and UQAM. For details, please refer to the School of Graduate Studies Calendar or contact the Department.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

The Department offers three programmes of study, and one other jointly with Journalism.

- a) BA, Specialization in Communication Studies: consisting of 60 credits in Communication Studies and 30 credits from electives outside the Department.
- BA, Major in Communication Studies: consisting of 42 credits in Communication Studies and 48 credits from electives outside the Department.
- c) BA, Specialization in Communication and Journalism: consisting of 60 credits in Communication and Journalism courses and 30 credits from electives outside Communication and Journalism.
- d) BA, Major in Communication and Cultural Studies: consisting of 42 credits in Communication Studies and 48 credits from electives outside the Department.

Elective credits are understood as courses taken in other departments or Faculties of the University. Credits in Communication Studies or Journalism, or in Cinema (Faculty of Fine Arts) may not be used in lieu of electives.

200-level courses are normally taken in first year, 300-level courses in second year, 400-level courses in third year.

Written work may be required in English for courses in Journalism; please consult the Department.

Students are required to complete the appropriate entrance profile for entry into the programme (see §31.002 - Programmes and Admission Requirements - Profiles).

60 BA Specialization in Communication Studies

- 18 COMS 230³, 240³, 256³, 278³, 280³, 282³
- 6-18 Chosen from courses in Cluster I*
- 24-36 Chosen from courses in Cluster II-IV with at least three credits from Cluster II and six credits from each of Clusters III and IV at the 300 or 400 level

*No more than one course from Cluster I may be done concurrently.

42 BA Major in Communication Studies

- 18 COMS 230³, 240³, 256³, 278³, 280³, 282³
- 6-12 Chosen from courses in Cluster I*
- 12-18 Chosen from courses in Cluster II-IV with at least three credits from each Cluster at the 300 or 400 level

*No more than one course from Cluster I may be done concurrently.

42 BA Major in Communication and Cultural Studies

Stage I

- COMS 240³, 325³, 326³
- 3 Chosen from COMS 301³, 302³, 303³, 304³

Stage II

- 3 Chosen from COMS 323³, 367³, 368³ Stage III
- 3 Chosen from COMS 462³, 463³, 465³
- 24 Chosen from Communication Clusters III and IV at the 300 or 400 level with at least six credits in each Cluster, and at least six credits at the 400 level in addition to the Stage III requirement.

60 BA Specialization in Communication and Journalism

NOTE: Students must meet the admission requirements of both the Departments of Communication Studies and Journalism. This programme is designed to prepare graduates for the English-language media.

Stage I

- 15 JOUR 2016, 2033; COMS 2403, 2563
 - 3 Chosen from COMS 278³, 282³ Stages II & III
- 3 Chosen from JOUR 205³, 215³
- 12 JOUR 302³, 303³, 310³, 315³
- 6 Chosen from COMS 378⁶, 387⁶
- 3 JOUR 400³
- 3 Chosen from JOUR 402³, 404³, 408³, 415³, 430³
- 15 Chosen from Communication Clusters III and IV at the 300 or 400 level.

1st-Year Courses

1ST-YEAR COURSES:

COMS 230	Basic Writing for the Media	COMS 278	Sound I (3 credits)
	(3 credits)	COMS 280	Film I (3 credits)
COMS 240	Communication Theory	COMS 282	Television I (3 credits)
	(3 credits)	COMS 325*	Approaches to Communication
COMS 256	Introduction to Digital		Research (3 credits)
	Communication Media	COMS 326*	Media Institutions and Policies

(3 credits) (3 credits)

*These courses are reserved for students enrolled in the Communication and Cultural Studies Major.

174. COMMUNICATION STUDIES

	CLUSTERS:			
I. Laboratory	COMS 378 COMS 379 COMS 380 COMS 381 COMS 387	Sound II (6 credits) Visual Dynamics I (6 credits) Visual Dynamics II (6 credits) Film II (6 credits) Television II (6 credits)	COMS 478 COMS 481 COMS 487 COMS 490	Sound III (6 credits) Film III (6 credits) Television III (6 credits) Communication Programming (6 credits)
II. Seminar/Practicum	COMS 305	Advanced Scriptwriting for Film (6 credits)	COMS 444	Television Aesthetics I (3 credits)
	COMS 324	Communication Analysis of	COMS 445	Television Aesthetics II
	COMS 330	Environment (3 credits) Advanced Scriptwriting for	COMS 470	(3 credits) Advertising and the Consumer
		Television (6 credits)		Society (3 credits)
	COMS 355	New Technology and Communication Media I (3 credits)	COMS 471	Public Relations: Principles and Problems (3 credits)
	COMS 356	New Technology and Communication Media II (3 credits)		
III. Media Theory,	COMS 301	Selected Topics in National Cinemas (Cycled Courses)	COMS 331	Documentary Television (3 credits)
History and Criticism	COMS 302	(3 credits) Selected Topics in Film Genres	COMS 362	Psychology of Communication (3 credits)
	COMS 303	(Cycled Courses) (3 credits) Selected Topics in Canadian	COMS 365	History of Sound Recording (3 credits)
		Cinemas (Cycled Courses) (3 credits)	COMS 416 COMS 417	Film Criticism (3 credits) Film Ideas (3 credits)
	COMS 304	Selected Topics in Film Studies (Cycled Courses) (3 credits)	COMS 434	Advanced Topics in Film Studies (3 credits)
	COMS 306 COMS 320	Documentary Film (3 credits) Media Styles, Modes, and	COMS 435	Advanced Topics in Documentary Film and
		Carriers (3 credits)		Television (3 credits)
	COMS 321	History of Media Technologies (3 credits)	COMS 462	Communication, Culture, and Popular Art (3 credits)
	COMS 322	Media and Media Culture	COMS 463	Semiotics (3 credits)
	COMS 323	(3 credits) Media Theory (3 credits)	COMS 465	Rhetoric and Communication (3 credits)
IV. Media and	COMS 352	Broadcasting Policy in Canada (3 credits)	COMS 453	Communication Ethics (3 credits)
Society	COMS 354	Children's Television	COMS 454	Communication Law and
	COMS 360	(3 credits) Mass Communication (3 credits)	COMS 460	Administration (3 credits) Political Communication (3 credits)
	COMS 361	Seminar in Propaganda (3 credits)	COMS 461	Organizational Communication (3 credits)
	COMS 364	Communications and Indigenous Peoples (3 credits)	COMS 464	Race, Ethnicity and Media (3 credits)
	COMS 366	Interpersonal Communication and Cultural Context (3 credits)	COMS 468	Communications, Development and Colonialism (3 credits)
	COMS 367	Media and Cultural Context (3 credits)	COMS 472	Communication Technologies and Gender (3 credits)
	COMS 368	Media and Gender (3 credits)	COMS 473	International Communications

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Courses

COMS 230 Basic Writing for the Media (3 credits)

(3 credits)

Seminar in Media Forecast

COMS 437

Prerequisite: Registration in a Communication

Studies programme. This course is designed to provide knowledge of and practice in the special written forms and formats utilized by the media.

(3 credits)

Assignments are practically oriented towards possible student productions.

COMS 240 Communication Theory

(3 credits)

Prerequisite: Registration in a Communication Studies programme. Through lectures, discussions, and selected readings from the works of key theoreticians, this course introduces students to major approaches to the understanding of the process of communication.

COMS 256 Introduction to Digital Communication Media

(3 credits)

Prerequisite: Registration in a Communication Studies programme. This course introduces the student to basic concepts in digital communications, primarily computer-based media, and their application to the fields of television, film and sound production. The course provides an historical, theoretical, and critical perspective on new and developing digital technologies.

COMS 278 Sound I (3 credits)

Prerequisite: Registration in a Communication Studies programme. This course is designed to provide the student with a basic working knowledge of audio systems both natural and electronic, to understand the various affective and psychological qualities of sound, and how sound may be structured into imaginative aural forms. Lectures and laboratory: average six hours per week.

COMS 280 Film I (3 credits)

Prerequisite: Registration in a Communication Studies programme. The course is designed to provide students with a basic working knowledge of the communicational and aesthetic characteristics of the medium of film, and of the specific elements inherent in their effective use. Course methodology includes lectures, screenings, readings, workshops and exercises using 16mm film. Lectures and laboratory: average six hours per week.

NOTE: Students who have received credit for COMS 275 or for this topic under a COMS 298 number may not take this course for credit.

COMS 282 Television I (3 credits)

Prerequisite: Registration in a Communication Studies programme. The course is designed to provide students with a basic working knowledge of the communicational and aesthetic characteristics of the medium of television, and of the specific elements inherent in their effective use. Course methodology includes lectures, screenings, readings, workshops and exercises using television. Lectures and laboratory: average six hours per week.

NOTE: Students who have received credit for COMS 284 or for this topic under a COMS 298 number may not take this course for credit.

COMS 298 Selected Topics in Communication Studies

(3 credits)

COMS 299 Selected Topics in Communication Studies (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

COMS 301 Selected Topics in National Cinemas (3 credits)

Prerequisite: 30 credits; permission of the Department. This course focuses on selected national cinemas. The analytic perspective of the course varies but may encompass such issues as cultural contexts; aesthetic conventions; economic and policy constraints; and the history of canons and their renewals. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 302 Selected Topics in Film Genres (3 credits)

Prerequisite: 30 credits; permission of the Department. This course presents an analysis and critique of the medium of film through the framework of conceptions of genre. The analytic focus of the course varies but may include such issues as the history of genre theory as it has been applied in film analysis; the analysis of canonical genres (e.g. film noir, neo-realism, the western); the analysis of emergent or hybrid film genres (e.g. women's cinema, the experimental cinema, docudrama). Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 303 Selected Topics in Canadian Cinemas (3 credits)

Prerequisite: 30 credits; permission of the Department. This course focuses on the analysis and critique of cinema practices in Canada. It may include the analysis of such issues as regional or cultural specificities (e.g. le cinéma québécois, film in British Columbia, African-Canadian cinema); the analysis of particular historical periods (e.g. the Canadian Silent cinema, independent cinema in the 1980s); or particular aesthetic formations (e.g. the "cinema d'auteur", Studio D of the National Film Board). Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 304 Selected Topics in Film Studies (3 credits)

Prerequisite: 30 credits; permission of the Department. The topic of this course varies but may include such issues as film theories; the political economy of cinema; the analysis of particular periods in film history; the analysis of the films of particular directors and/or producers; film policies, or the relations between film, video, and television. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 305 Advanced Scriptwriting for Film (6 credits)

Prerequisite: Registration in a Communication Studies programme; submission of a qualifying assignment by July 1 and subsequent approval of instructor. This assignment, which varies from year to year, is intended to test the student's writing ability and creative imagination. A practical course in writing film-drama: story construction and plotting, scene-making, characterization and character development, dialogue, dramatic continuity, timing, pacing, rhythm, suspense, and creative criticality. Many of these fictional and dramatic techniques are, as the occasion arises, applied to non-fictional scripts as well. The method consists of lecture, discussion, demonstration, critique. Assignments are on-going.

COMS 306 Documentary Film (3 credits)
Prerequisite: 30 credits; open to all University
students; permission of the Department. A
survey of the documentary film field from 1895
until today, with an examination of major styles
(romantic, realistic, expressionistic, avantgarde, etc.) in the works of significant documentary filmmakers. The method consists of
lecture, screenings, critique, and discussion.

Communication Studies students may take no more than six credits from the Mel Hoppenheim School of Cinema or Department of Print Media and Photography courses of the Faculty of Fine Arts.

COMS 320 Media Styles, Modes, and Carriers (3 credits)

Prerequisite: Registration in a Communication Studies programme. This course examines selected elements from the history of representational arts, such as painting, architecture, drama or music, as instances of forms and styles of communication. Readings and viewings of major styles, artworks, and authors are included.

COMS 321 History of Media Technologies (3 credits)

Prerequisite: Registration in a Communication Studies programme. This course examines the history of the technical aspects of such media as photography, cinema, scenography, radio, and television. This history is considered in relationship to social, cultural and formal developments within these media.

COMS 322 Media and Media Culture (3 credits)

Prerequisite: Registration in a Communication Studies programme. Media, and their impact on people and society, in order of historical appearance: literacy, printing, the still photograph, cinema, radio, television. The growth of the technologies of work, movement, education, thought, and social organization. The problems of the individual in a technological environment. NOTE: Students who have received credit for COMS 304 may not take this course for credit.

COMS 323 Media Theory (3 credits)

Prerequisite: Registration in a Communication Studies programme. Analysis of the historical and current evidence in an attempt to understand what media are, what they do of themselves, their common characteristics, cumulative patterns, and necessary effects. Are there inherent "laws" of media? Emphasis is on the intellectual faculty as manifested in society's response to media. NOTE: Students who have received credit for COMS 304 may not take this course for credit.

COMS 324 Communication Analysis of Environment (3 credits)

Prerequisite: 30 credits; registration in a Communication Studies programme. This course engages in general and detailed analysis of various information complexes: museums, galleries, exhibitions, countrysides, landscapes, city streets, highways, department stores, churches, and others. These analyses are conducted from the standpoint of information values used to influence prospective audiences of films, television programmes, or exhibition and theatre visitors. The basic values of light, space, sound, picture, words, and exhibit structures are explored through individual student projects in real locations. Students work on individual projects under the supervision of the directing professor. Tutorial course. NOTE: Students who have received credit for COMS 255 may not take this course for credit.

COMS 325 Approaches to Communication Research (3 credits)

Prerequisite: Registration in Communication and Cultural Studies Major; or permission of the Department. This course introduces students to the logics of inquiry of the major research approaches used within Communication and Cultural Studies. It familiarizes students with the formation of research questions, the choice of appropriate methodological tools, and the interpretation and reporting of research findings. There is a particular focus on qualitative approaches to field research and discourse and textual analysis.

COMS 326 Media Institutions and Policies (3 credits)

Prerequisite: Registration in Communication and Cultural Studies Major; or permission of the Department. This course introduces students to the analysis of the institutional, political, and economic forces that have shaped the development of media during the twentieth century. Attention is given to the ownership structures, corporate practices, and state policy interventions affecting media institutions in both the public and private sectors. A particular focus is given to the interrelations between Cultural, Multicultural, and Communication Policy interventions.

COMS 330 Advanced Scriptwriting for Television (6 credits)

Prerequisite: Registration in a Communication Studies programme; submission of a qualifying

assignment by July 1 and subsequent approval of instructor. This assignment, which varies from year to year, is intended to test the student's writing ability and creative imagination. Anatomy of script; audio-visual components and functions; TV drama, comedy, documentary, docu-drama. The creative process: plot development, character and dialogue; uses of tension, conflict, "tricks of the trade"; professional attitude and discipline vis-à-vis the market. Lectures, demonstrations, group discussions, and script projects.

COMS 331 Documentary Television (3 credits)

Prerequisite: 30 credits; open to all University students; permission of the Department. A survey of the documentary television field from its beginning until today, with an examination of characteristic styles and forms (informative, biographical, current events, compilative, etc.). The method consists of lecture, video example, critique, and discussions.

COMS 352 Broadcasting Policy in Canada (3 credits)

Prerequisite: 30 credits; permission of the Department. This course acquaints the student with the historical development of broadcasting and broadcasting legislation in Canada. It covers the present state of broadcasting policy in Canada, its goals and problems, and explores alternative solutions.

NOTE: Students who have received credit for COMS 467 may not take this course for credit.

COMS 354 Children's Television

(3 credits)

Prerequisite: 30 credits; permission of the Department. This course explores forms of communication that have developed between children and television. Topical areas include future policies and planning in the light of developmental needs, ethical parameters, and experiments in creative empowerment.

COMS 355 New Technology and Communication Media I

(3 credits)

Prerequisite: COMS 256; permission of the Department. This course examines the applications of computers in the field of communications from conceptual, theoretical, and practical perspectives. Analog and digital representation, transmission, storage, and processing of visual and aural information are discussed. Lectures and laboratory.

COMS 356 New Technology and Communication Media II

(3 credits)

Prerequisite: COMS 355; permission of the Department. This course examines more advanced concepts and techniques for the production of computer-generated colour video graphics; computer-generated sound; information input/retrieval networks; hypertext, hypermedia, other digital media, and interactive multi-media systems. Lectures and laboratory.

COMS 360 Mass Communication

(3 credits)

The course examines the nature and forms of mass communication, the social sources and uses of mass communication, its psychology, audiences, and effects. The ethics of mass communication are also discussed. Through guest lecturers from the various media and readings of contemporary analyses/critiques, issues such as media ownership and access, government and self-regulation, technological implications, media accountability, etc., are raised.

COMS 361 Seminar in Propaganda (3 credits)

Prerequisite: 30 credits. The aim of this course is to recognize the orchestration of the elements of propaganda in media, and to develop the means to deal with it. Course methodology includes lectures, discussions, and projects.

COMS 362 Psychology of Communication (3 credits)

Prerequisite: Registration in a Communication Studies programme. The objectives of the course are to provide the learner with: 1) an overview of psychological processes active in the communicative act; 2) the opportunity to explore a single media area in depth, either independently or in a small group. Through a variety of formats, topic areas such as the following are explored: perception and information processing, language development, areas of para-psychology related to communication, influences on attitude/behaviour, verbal/non-verbal codes, meaning, etc.

COMS 364 Communications and Indigenous Peoples (3 credits)

Prerequisite: 30 credits; permission of the Department. Focusing on the Canadian North, selected circumpolar regions, parts of Australia and other areas of the world inhabited by indigenous peoples, this course examines historical and theoretical contexts of aboriginal media — financing, audience research, product development, distribution issues, and policy formation. Broadcasting, print, and information highway case studies and materials are a central component.

COMS 365 History of Sound Recording (3 credits)

Prerequisite: 30 credits; permission of the Department. This course traces the technological development of sound recording and establishes the historical context and the social and economic conditions in which this development has occurred. The evolution of studio recording practices, the structure of the music industry and its global operations, changes in the production and consumption of music, and

changes in the role of music as a form of cultural communication are examined. Attention is also given to sound recording practices in cinema, radio, television and digital media. NOTE: Students who have received credit for COMS 398F may not take this course for credit.

COMS 366 Interpersonal Communication and Cultural Context (3 credits)

Prerequisite: 30 credits; permission of the Department. This course examines the relationship between value orientations, social perception, self-concept, identity, and other culturally-determined phenomena, as well as verbal and non-verbal communication processes. It draws upon theory and research on communication between members of different cultures and sub-cultures.

NOTE: Students who have received credit for COMS 363 may not take this course for credit.

COMS 367 Media and Cultural Context (3 credits)

Prerequisite: 30 credits; permission of the Department. This course examines the ways in which different cultures express themselves using print, film, radio, and television; the cultural content of media messages; the role of mass communication across cultural boundaries, as well as media representation of, and access by, cultural groups. The course utilizes screenings and case studies.

NOTE: Students who have received credit for COMS 363 may not take this course for credit.

COMS 368 Media and Gender (3 credits)
Prerequisite: 30 credits; permission of the
Department. This course investigates how sex
and gender are represented in and by the
media. The course examines sexuality, sexism,
and theories of gender through a critical
examination of contemporary media topics.
NOTE: Students who have received credit for
this topic under a COMS 398 number may not
take this course for credit.

COMS 378 Sound II (6 credits)

Prerequisite: COMS 230; COMS 278; permission of the Department. This course gives the student a knowledge of the basic disciplines necessary for constructing aural message forms from the simplest to the most complex; experience in the various technologies required to apply these aural forms to radio, film, television, etc. Students prepare, produce, and direct, individually and in teams, a number of projects. Lectures and laboratory: average six hours per week.

COMS 379 *Visual Dynamics I* (6 credits)
Prerequisite: COMS 280 or permission of the
Department. This course involves both theory
and fieldwork in photographing human-created
environments; e.g. the city, using natural light.
The student acquires an understanding of the
problems of distance and direction by means of

lectures, critiques of fieldwork, and individual consultation.

NOTE: Students are required to possess certain recommended equipment.

NOTE: Students who have received credit for COMS 374 may not take this course for credit.

COMS 380 Visual Dynamics II (6 credits)
Prerequisite: COMS 379 or permission of the
Department. A study of the development of
visual artifacts and media in the search for an
increasingly adequate mimesis of persons,
situations, and meanings. The course
comprises both the practical and the theoretical
aspects of the visual image, historically and
currently, and examines the assumptions
underlying the quest for the auto-communicative
image. Lectures and laboratory: average six
hours per week.

NOTE: Students who have received credit for COMS 375 may not take this course for credit.

COMS 381 Film II (6 credits)

Prerequisite: Above-average standing in COMS 280; permission of the Department. This course involves an examination of the communicative process through the medium of film. Areas covered include scripting, directing, and shooting, with both silent and sync-sound equipment. Productions are designed to test the student's theoretical knowledge and give practical experience in the craft of filmmaking. Lectures and laboratory: average six hours per week.

COMS 387 Television II (6 credits)

Prerequisite: COMS 282; permission of the Department. A study of the components related to the creation of the television documentary and short-feature programme in terms of the theoretical possibilities inherent in the medium. Student productions in the two genres, from idea-stage through completed videotape, constitute the laboratory section of the course. Lectures and laboratory: average six hours per week.

COMS 398 Selected Topics in Communication Studies

(3 credits)

COMS 399 Selected Topics in Communication Studies

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

COMS 416 Film Criticism (3 credits)

Prerequisite: 60 credits; permission of the Department. An introduction to the assumptions, methodologies, and vocabularies implicit in important schools of popular and academic film criticism.

COMS 417 Film Ideas (3 credits)

Prerequisite: Registration in a Communication Studies programme. Seminar using film criticism

to focus on aesthetic/cultural dimension of present trend-setting films, and to explore students' sensibility in the context of contemporary culture. Methodology includes viewings, discussions, written critiques, critical/aesthetic readings.

Advanced Topics in Film **COMS 434** Studies (3 credits)

Prerequisite: 60 credits; registration in a Communication Studies programme. This course provides an in-depth study of a selected area of film studies. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 435 Advanced Topics in Documentary Film and **Television** (3 credits)

Prerequisite: COMS 306 or 331; 60 credits; registration in a Communication Studies programme. This course provides an in-depth study of selected film and television documentary genres. Specific topics for this course will be stated in the Undergraduate Class Schedule. NOTE: Students who have received credit for COMS 436 may not take this course for credit.

COMS 437 Seminar in Media Forecast (3 credits)

Prerequisite: 60 credits. This course examines trends in film, sound, television, and other media for future applications. The course includes theory of media effects. Representatives from industry and government are invited to discuss future trends in media utilization. The course demands a theoretical and practical model for original or novel use of a medium or media mix.

COMS 444 Television Aesthetics I (3 credits)

Prerequisite: 30 credits; registration in a Communication Studies programme. This course involves the study and application of evaluative judgements and aesthetic principles appropriate to the television medium. It emphasizes the development of television criticism and aesthetics based on a synthesis of the fundamental image elements (light, colour, space, time, motion, and sound) together with an analysis of their interrelationship in the finished product: the television programme.

COMS 445 Television Aesthetics II (3 credits)

Prerequisite: COMS 444. This tutorial course is a continuation of COMS 444 for students who wish to do research and experimentation with specific aspects of television aesthetic principles. Assignments include a research paper derived from specific experimental television production units.

COMS 453 Communication Ethics (3 credits)

Prerequisite: 60 credits; COMS 361 or permission of the Department. This course allows students to confront issues of creative responsibility and ethical dilemmas in media practice. Emphasis is placed upon the relationship between production and theory at the level of ethical responsibility. Specific issues include ethical theories as applied to media, communication and information; the relationship of human values and technologies of information reproduction; the possibilities of critical media practice; identification of challenges emerging from undergraduate experience in Communication Studies.

NOTE: Students who have received credit for COMS 498M, JOUR 446 may not take this course for credit.

COMS 454 Communication Law and Administration (3 credits)

Prerequisite: 30 credits; registration in a Communication Studies programme. This course focuses upon the legal and business aspects of the communications industry. Among the items covered are basic contract law, torts or delicts, libel and slander, and copyright laws. The legal relationships between the various parties involved in the field of communications, e.g. producer and writer are also analysed.

COMS 460 Political Communication (3 credits)

Prerequisite: Permission of the Department. The relationships between media institutions and political institutions, both in Canada and internationally, are examined. Issues such as: the flow of political information; the social and political construction of news; the politics of regulation; the politics of influence in campaigns, nation-building socialization through media; ideology in the media, and alternatives to traditional media are explored.

NOTE: Students who have received credit for COMS 465 may not take this course for credit.

Organizational Communication **COMS 461** (3 credits)

Prerequisite: Permission of the Department. The flow of communication within organizational and institutional structures is examined. Topics such as: communication function; patterns and networks; directionality; overload and underload; communication roles and expectations; and processes of organizing are explored. Discussion and field study are combined with readings for an emphasis on applied theory.

NOTE: Students who have received credit for COMS 465 may not take this course for credit.

COMS 462 Communication, Culture, and Popular Art (3 credits)

Prerequisite: 60 credits; permission of the Department. An introduction to the social analysis of works of popular art. Cultural products such as television programmes, hit records, and popular novels are examined through techniques of textual analysis. Within the context of an examination of cultural theories, the course focuses on (1) critical methods based in the theory of rhetoric and (2) theories of mass culture and alienation.

COMS 463 Semiotics (3 credits)

Prerequisite: Registration in a Communication Studies programme. This course provides a detailed introduction to the semiotics of communication. The course considers the formal characteristics of signs and codes and examines how signs or texts produce meaning. Central to this course is the notion that sign-systems are fundamental to the production of knowledge and ideology. The course proceeds through lectures, an analytical reading of assigned texts, and student discussion and presentations.

COMS 464 Race, Ethnicity and Media (3 credits)

Prerequisite: 60 credits; permission of the Department. This course addresses practical and theoretical issues of race and ethnicity that have become focal points for current debates in public cultural expression and media studies. The following themes are discussed: cultural/ racial difference and its implications for media studies; the (mis)representation of multicultural and multiracial minorities in mainstream and alternative media; questions of access to arts and other cultural funding sources; implications of employment equity legislation in light of media budget cuts; and cross-cultural awareness programmes vs. anti-racist training for media professionals. Theoretical readings which frame issues of cultural and racial representation are an integral part of this course.

NOTE: Students who have received credit for COMS 498R may not take this course for credit.

COMS 465 Rhetoric and Communication (3 credits)

Prerequisite: 60 credits. This course focuses upon communication as persuasive or as producing identification. Emphasis is placed upon the role of communication in civic affairs. Classical and contemporary approaches to rhetorical theory and criticism are examined.

COMS 468 Communications, Development and Colonialism (3 credits)

Prerequisite: 60 credits; permission of the Department. This seminar discusses the role media can play in indigenous and international development. The concept of development communications is examined in the context of debates within neo-colonial and post-colonial theories.

COMS 470 Advertising and the Consumer Society (3 credits)

Prerequisite: Permission of the Department. Advertising as an economic force is examined from a mass-media focus. Communication strategies are analysed. A promotional campaign is prepared and presented as a team project.

COMS 471 Public Relations: Principles and Problems (3 credits)

Prerequisite: Permission of the Department. This course considers the principles and

responsibilities of public relations, and critically examines specific P.R. problems and the choice of media in effecting solutions.

COMS 472 Communication Technologies and Gender (3 credits)

Prerequisite: 30 credits; permission of the Department. Feminist theories of communication technologies are used to critique the impact and meanings of these technologies in various spheres of cultural activity. Topics include the mass media, technological mediations in organizations and institutions, and the re-articulation of domestic and public spaces, such as the Internet and the World Wide Web. Special attention is paid to these electronic and digital technologies - or new media - and the communicational and representational possibilities they enable or foreclose. The class is conducted as an intensive seminar. Completion of a prior course in women's studies or gender studies is recommended.

NOTE: Students who have received credit for COMS 398S may not take this course for credit.

COMS 473 International Communications (3 credits)

Prerequisite: 60 credits; permission of the Department. This course explores historical and current parameters of international communications within the context of current global shifts in power/knowledge relations. Discussion topics are selected from among the following: key development and neo-colonial theories, cultural/media imperialism, globalization, the UN infrastructure, the Right to Communicate debates, national sovereignty issues, international broadcasting, cross-cultural audience reception research and effects theories, telediplomacy, the World Wide Web (Internet), women as an international constituency group, and others.

COMS 478 Sound III (6 credits)

Prerequisite: COMS 378; permission of the Department. This course examines the concepts and techniques of digital audio, digital signal processing, sound sampling, synthesis, and MIDI sequencing in media production and postproduction. Through the analysis and discussion of selected media programmes, students develop an awareness of the requirements, possibilities, and emerging conventions of digital audio production. Students produce a number of sound projects individually or in teams. Lectures and laboratory: average six hours per week.

COMS 481 Film III (6 credits)

Prerequisite: Above-average standing in COMS 381; permission of the Department. An advanced course in film theory and communication. Filmmaking processes covered include scripting, directing, "A and B roll" editing, and shooting with crystal sync-sound equipment. Lectures and laboratory: average six hours per week.

COMS 487 Television III (6 credits) Prerequisite: Above-average standing in COMS 387; permission of the Department. An advanced course in television theory and communication. Possible options, depending on the ability of the students in any one year, include the dramatic documentary and the complete adaptation for television of professional plays. Lectures and laboratory: average six hours per week.

COMS 490 Communication Programming (6 credits)

Prerequisite: COMS 355; permission of the Department. This course studies the taxonomy of digital media from an information design and programming perspective. Special attention is given to authoring tools, scripting, hypermedia and hypertext applications in their current and developing digital forms. Individual or group projects are completed. Lectures and laboratory: average six hours per week.

No more than six credits may be taken in Apprenticeships or Directed Study. The appropriate Cluster for Apprenticeship and Directed Study courses is determined by the course content as outlined in the student proposal.

COMS 494 Communication Studies Apprenticeship I (3 credits)

Prerequisite: 30 credits; registration in a Communication Studies programme; permission of the Department. In consultation with the Apprenticeship Committee, students are given the opportunity to work in the communications industry under the co-supervision of a faculty member and a media professional. Students may be accepted for an open apprenticeship position offered to the Department, or they may formulate a study proposal on their own initiative. In order to receive credit, the apprenticeship proposal must be approved by the Committee.

COMS 495 Communication Studies Apprenticeship II (3 credits)

Prerequisite: Registration in a Communication Studies programme; permission of the Department.

NOTE: Students who have received credit for COMS 494 may register for COMS 495.

Directed Study I (3 credits) **COMS 496** Prerequisite: Registration in a Communication Studies programme. Towards the end of their second year, students enrolled in a Communication Studies programme who have demonstrated scholarly and creative ability may be selected for major research or production in a communications area of special interest. During the third year, individually or in teams, the project is realized in close collaboration with faculty directors. NOTE: Students who have received credit for COMS 495 may not take this course for credit.

Directed Study II (3 credits) COMS 497 Prerequisite: Registration in a Communication Studies programme.

NOTE: Students who have received credit for COMS 496 may register for COMS 497.

Advanced Topics in **COMS 498 Communication Studies** (3 credits)

COMS 499 Advanced Topics in Communication Studies (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.080

ECONOMICS

_		
FΞ	2	ıltv

Chair IAN IRVINE, Professor

Professors
JALEEL AHMAD
SYED AHSAN
JON BRESLAW
GORDON FISHER
JAMES McINTOSH
FRANK MÜLLER
MORTON STELCNER

Associate Professors SHAFIQ ALVI

ANASTAS ANASTASOPOULOS

CHRISTIAN BELZIL
BRYAN CAMPBELL
NURAL ISLAM
M. GREGORY LEBLANC
ZENG RUNG LIU
DAN OTCHERE
BALBIR S. SAHNI
MICHAEL SAMPSON
ECKHARD SIGGEL
WILLIAM M.A. SIMS

Assistant Professors
KARINE GOBERT
CORINNE LANGINIER
CHRISTIAN SIGOUIN

Location

Loyola Campus Centennial Building, 3rd Floor Sir George Williams Campus Annex GM, Room: 302-7 (514) 848-3900

Department Objectives

The Department aims to educate students in economics, both at the graduate and undergraduate level, and to contribute to the advancement of the discipline through research and teaching. Economists study the production, distribution, and consumption of goods and services — essential knowledge for today's business people and policy makers. Blending both theory and practical applications, the Department of Economics serves students preparing for related specialized professions (Honours, Specialization, Co-operative) as well as those interested in a generalized understanding of the discipline (Major, Minor programmes).

Programmes

Students are responsible for satisfying their particular degree requirements.

Students must apply to the departmental Honours adviser for formal admission to the Honours programme. The application is usually made after completion of the first-year courses.

The superscript indicates credit value.

NOTE: Calculus I is a prerequisite for many Economics courses. Students who have not taken MATH 209 or equivalent must take it as an elective within their first 15 credits.

BA DEGREE PROGRAMMES IN ECONOMICS

6 **ECON 2213, 2223

BA Honours in Economics Stage II ECON 3013, 3023 Stage I 6 *ECON 2013, 2033 ECON 303³, 304³ 6 6 **ECON 2213, 2223 Chosen from ECON 318³, 319³ 3 ECON 324³, 325³ Stage II ECON 301³, 302³ 6 3 ECON elective credits ECON 303³, 304³ ECON 325³, 326³ Stage III ECON 4233 6 3 ECON 324³ 400-level ECON elective credits Chosen from ECON 318³, 319³ Stage III 42 BA Major in Economics ECŎN 401³, 403³ 6 Stage I ECON 421³, 422³ 6 *ECON 2013, 2033 6 400-level ECON elective credits 6 **ECON 2213, 2223 Stage II 6 ECON 301³, 302³ 6 ECON 303³, 304³ **BA Specialization in Economics** Stage I 6 *ECON 2013, 2033 3 Chosen from ECON 318³, 319³, 324³

ECON elective credits

Stage III

2 400-level ECON credits

30 Minor in Economics

Stage I

- 6 *ECON 201³, 203³ Stage II
- 6 ECON 318³, 319³
- 6 ECON elective credits

Stage III 12 ECON elective credits

*Students exempted from ECON 201 and/or 203 are required to replace these courses with ECON elective credits.

**Any equivalent six credits satisfy this component of the programme. See §200.7.

BCOMM DEGREE PROGRAMMES IN ECONOMICS

BComm Honours in Economics BComm Major in Economics

(See §61.60)

BUSINESS STUDIES

Certificate in Business Studies Minor in Business Studies (See §61.140)

Economics Co-operative Programme

Director

BALBIR S. SAHNI, Associate Professor

The Economics Co-operative programme is offered to students who are enrolled in the BA Honours or Specialization in Economics. Students interested in applying for the Economics co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Economics co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ECON 200 Introductory Economics (6 credits)

This course is designed primarily for students not majoring in Economics or Commerce, but who wish to have an introduction to economics and the Canadian economy. Its content is essentially the same as that of ECON 201 and ECON 203. However, there is greater emphasis on the economic environment of the firm, and the use of elementary tools of analysis to study Canadian economic institutions, government economic policies, and current economic issues. NOTE: Students who have received credit or exemption for ECON 201 and/or 203, or equivalent, may not take this course for credit.

ECON 201 Introduction to Microeconomics (3 credits)

Introduction to the functioning of the market system; concepts of supply and demand, the role of prices in resource allocation; production decisions by firms. Analysis of differences between competition and monopoly, and the implications for economic efficiency; theories of labour markets and wage determination.

NOTE: Students who have received credit or exemption for ECON 200 may not take this course for credit.

ECON 203 Introduction to Macroeconomics (3 credits)

An introductory analysis of aggregate economic activity. The focus is on the principles of determination of the level of employment, national income, real output, inflation, and international balance of payments. The course also analyses the principles which govern trade relations among countries. These topics are integrated by a discussion of government monetary and fiscal policies to stabilize economic activity. NOTE: Students who have received credit or exemption for ECON 200 may not take this course for credit.

ECON 221 Statistical Methods I (3 credits) Prerequisite: Cégep Mathematics 311 or MATH 201. Elementary probability, permutations and combinations, binomial and normal distribution. Analysis and organization of statistical data. Tests of hypotheses. Confidence limits. Introduction into linear regression and correlation. NOTE See §200.7

ECON 222 Statistical Methods II (3 credits) Prerequisite: ECON 221; MATH 209; or equivalent. The course is an introduction to the application of statistical techniques to economic

data. Topics discussed include, among others, time series, statistical inference, analysis of variance, correlation and regression.

NOTE See §200.7

ECON 251 Economic History Prior to the Industrial Revolution (3 credits)

This course is an introduction to the economic development of the Western world prior to the Industrial Revolution. The emphasis is on economic factors in history: evolution of economic systems, economic growth, development and regression within the context of changing institutional constraints. Interconnections among economic, social, and intellectual change are highlighted.

NOTE: Students who have received credit for ECON 250 may not take this course for credit.

ECON 252 Economic History After the Industrial Revolution (3 credits)

This course is an introduction to the main economic trends in the era of sustained growth and development which accelerated with the Industrial Revolution and continues to the present. The emphasis is on Europe with some coverage of North America and the colonial/developing world.

NOTE: Students who have received credit for ECON 250 may not take this course for credit.

ECON 298 Selected Topics in Economics (3 credits)

ECON 299 Selected Topics in Economics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ECON 301 Intermediate Microeconomic Theory I (3 credits)

Prerequisite: ECON 201, 203; MATH 209 or equivalent. Theory and measurement of demand, theory of consumer behaviour, production, theory of the firm, and cost and revenue analysis.

ECON 302 Intermediate Microeconomic Theory II (3 credits)

Prerequisite: ECON 301. Market structures (perfect competition, monopoly, oligopoly), industrial concentration, factor markets, income distribution, economic efficiency, general equilibrium, welfare economics.

ECON 303 Intermediate Macroeconomic Theory I (3 credits)

Prerequisite: ECON 201, 203; MATH 209 or equivalent. The course introduces basic aggregative models to explore different theories on the determination of national income, interest rates and exchange rates. Topics covered include the definitions and measurements of indicators of economic activity; the components of aggregate supply and aggregate demand; the

supply and demand for money; and the dynamics of national debt and deficit. The role of macro-economic policy, such as fiscal and monetary policy, is also examined.

ECON 304 Intermediate Macroeconomic Theory II (3 credits)

Prerequisite: ECON 303. This course builds on the concepts developed in ECON 303 by introducing additional features to the basic models, such as the formation of expectations and attributes of the labour market, and then using these models to explore different theories concerning the determination and the evolution of major aggregate variables, economic growth and business cycles. The role of macroeconomic policy, with an emphasis on Canada, is also examined.

ECON 311 Economic Development (3 credits)

Prerequisite: ECON 201, 203. The course investigates comparative economic development, with special attention to problems of capital formation, population growth, quality of labour force, and social and cultural attitudes towards economic modernization. Theories of economic development are evaluated in the context of the realities of historical patterns and the varying degrees of ability to achieve modernization.

ECON 315 The Economic Development of Québec (3 credits)

Prerequisite: ECON 201, 203. This course reviews past and present trends in the economic development of Québec. Emphasis is placed on the economic growth of Québec since the Second World War. Attention is given to the regional aspects of Québec's growth problems.

ECON 318 Canadian Economic Policy and Institutions (3 credits)

Prerequisite: ECON 201, 203. This course focuses on economic policies and institutions related to contemporary issues in the domestic economy. It is guided by the application of economic principles to such issues as regional disparities, income distribution and inequality, intra-provincial trade, social security policies, welfare programmes, foreign ownership and control, competition policy, government regulation of business, unemployment, inflation, and environmental policy.

NOTE: Students who have received credit for ECON 316 may not take this course for credit.

ECON 319 International Economic Policy and Institutions (3 credits)

Prerequisite: ECON 201, 203. This course focuses on economic policies and institutions related to issues such as protectionism, regionalism, and globalization. Selected topics in exchange rate and currency convertibility, liberalization of economic systems, and international economic development are also covered. NOTE: Students who have received credit for ECON 317 may not take this course for credit.

ECON 324 Economic Data Analysis (3 credits)

Prerequisite: ECON 201, 203, 222. The objective of this course is to familiarize students with the techniques of data retrieval, manipulation, and analysis. Particular emphasis is placed on the CANSIM retrieval system, database programmes, spreadsheet analysis, and statistical packages. NOTE: Students who have received credit for ECON 323 may not take this course for credit.

ECON 325 Mathematics for Economists I (3 credits)

Prerequisite: ECON 201, 203; MATH 209 or equivalent. This course introduces students to core topics in algebra and optimization techniques. The topics covered include vector spaces and linear transformations; matrix operations; characteristic values and vectors; matrix differentiation. In addition, the course covers a review of constrained and unconstrained optimization with economic applications; Taylor series representation, implicit function theorem, and related topics.

NOTE: Students who have received credit for MAST 234 or MATH 251 or 282 may not take this course for credit.

ECON 326 Mathematics for Economists II (3 credits)

Prerequisite: ECON 325. This course covers more advanced topics in optimization methods and introduces students to techniques in economics dynamics, as well as applications of integration. Topics include quadratic forms and second-order conditions, Kuhn-Tucker theory, the maximum principle, difference and differential equations, discounting and the rudiments of probability theory.

NOTE: Students who have received credit for MAST 235, MATH 252 or 283 may not take this course for credit.

ECON 331 Money and Banking (3 credits)
Prerequisite: ECON 201, 203. Overview of a
monetary economy: nature, forms, and the
economic role of money. Monetary standards:
markets, prices, and the value of money; the
payments system; financial markets. Determinants
of size and distribution of wealth portfolios.
Supply of money: measure, composition, and
size determination. The economic role of
commercial banks and non-bank financial
intermediaries. Central banking and monetary
policy. The international monetary system.
(Topics covered within the Canadian banking
institutional framework.)

ECON 335 Public Sector Economics: Expenditures (3 credits)

Prerequisite: ECON 201, 203. This course examines government fiscal activity within the context of a free-market system. Rationale for public-sector activity is reviewed in terms of economic efficiency conditions and the market failures. Among the topics covered in the course

are growth of public spending, the concept of public good externalities, collective decision-making process, pure theory of public expenditures, local expenditures analysis, and efficiency in public spending, with special reference to Québec and Canada.

Public Sector Economics: Taxation (3 credits)

Prerequisite: ECON 201, 203. The principal purpose of this course is to examine and evaluate the important elements of the Canadian fiscal structure, emphasizing taxation and the financing of public expenditures. Among others, issues in taxation of income, both at the individual and corporate levels, excise and sales taxation, taxation of capital gains and wealth, intergovernmental fiscal relations, and tax reform are taken up.

NOTE: Accountancy Major students may not take this course for credit.

ECON 350 Economic History of Canada (3 credits)

Prerequisite: ECON 201, 203. This course introduces the student to Canadian economic development focusing on the period after Confederation. The course treats the subject in a thematic, rather than a chronological, fashion and places emphasis on conflicting schools of thought and their reflection in government policies. NOTE: Students who have received credit for ECON 351 may not take this course for credit.

ECON 352 Economic History of the U.S.A. (6 credits)

Prerequisite: ECON 201, 203. American economic history is presented from the viewpoint of the "new" economic history. This is a topical approach in which formal economics is used to evaluate traditional historical material. Among the topics covered are the economic consequences of slavery, the American business cycle, the development of American central banking, the merger movements, the causes of the American "take-off", and the economic causes and consequences of the major wars.

ECON 353 Economic History of Europe (6 credits)

Prerequisite: ECON 201, 203. The course explores the causes and consequences of the British industrial revolution and its diffusion to the Continent, in terms of differential national-growth patterns, and social problems associated with economic change. It includes an analysis of free trade, economic nationalism, the new imperialism, the importance of the crisis of 1929, in terms of economic organization, thought, and policy. Post-World War II reorganization, in terms of planning the welfare state, and economic integration.

ECON 361 Industrial Organization (3 credits)

Prerequisite: ECON 201, 203. This course develops the relationship of the firm to various

forms of market structure. The course focuses on the objectives of the corporation, corporate interdependence, and the government control of industry. A study of policy matters centres on anti-trust and corporate regulation, with respect to both the legislative and economic aspects.

ECON 362 Economics of the Firm (3 credits)

Prerequisite: ECON 201, 222. This course stresses the application of economic principles and methodologies to the decision-making process of the firm, with an emphasis on the role of risk and uncertainty. Topics include decision-making criteria, demand analysis and estimation, cost analysis and estimation, pricing theory under various market structures, applied topics in pricing, and the impact of government on the firm. This course is primarily of interest to Commerce students, but is open to others as well.

ECON 363 Economics of Technological Change (3 credits)

Prerequisite: ECON 201, 203. This course deals with a critical analysis of the technological constraints on economic processes, research and development, and the economic factors affecting the rate and direction of technological change. Topics include the economic implications of learning by doing and technical systems; microeconomic effects of innovation and adoption theory; and the long-term macroeconomic policy implications of technological change.

ECON 370 Comparative Economic Systems (6 credits)

Prerequisite: ECON 201, 203. A comparative study of contemporary economic systems. While mainly concerned with the institutional features of contemporary free-market economics, the course also deals with their counterparts: the systems of a command economy and a socialist market economy. Of primary interest are the institutions, mechanisms, and policies which govern allocation, efficiency, growth, and distribution of income, with emphasis on the historical background of the institutions and the social, political, and ideological influences which continue to shape them.

ECON 377 The Chinese Economy (3 credits)

Prerequisite: ECON 201, 203. This course covers an analysis of Chinese economic development since 1949. It focuses primarily on the economic transition from a planning system to a market economy. Topics include the central-planning system and its strategy for development, reforms in the agricultural organization and the structure of the industrial sector. The implications of the country's "open-door" economic policy for the global economy are also examined.

ECON 381 Labour Economics (3 credits) Prerequisite: ECON 201, 203. The general objective of this course is to acquaint the student with various theoretical and empirical issues in the

area of labour economics. Particular emphasis is placed upon the relation between theoretical frameworks and their empirical counterparts in Canada. Topics include the theory of wage determination, the effects of minimum wages, human capital theory, the economics of discrimination, and the economics of the household.

ECON 382 Industrial Relations I (3 credits) Prerequisite: ECON 201, 203. A study of the general and practical problems that arise in the labour field, such as collective bargaining, the legal framework for the settlement of industrial disputes, the weapons of industrial conflict; the labour movement; contemporary labour issues, such as automation, cost-push inflation, and structural employment.

ECON 386 Economics of Human Resources (3 credits)

Prerequisite: ECON 201, 203. A study of recent contributions by economists to the understanding of and solution to social problems which society currently faces in the areas of crime, health, education, and welfare. In addition, specific federal and provincial governmental policies in these areas are analysed with the standard tools of economics.

ECON 391 Economics of the Environment (3 credits)

Prerequisite: ECON 201, 203. The subject of this course is environmental quality. It proceeds through an analysis of the relationships among the natural environment, economics, and institutions. The objective is to depict the problem of environmental quality as an economic problem whose solution demands major changes in economic, political, and legal institutions. Attention is also given to policies of collective environmental actions in which the effective management of common property resources is discussed. The course concludes with a discussion of some broader issues, such as the consistency of improved environmental quality with continued economic and population growth.

ECON 392 Urban Economics (3 credits) Prerequisite: ECON 201, 203. This course focuses on the basic issues of economic growth

and stagnation, urban land use, the problems of the urban public economy, and special urban problems, such as transportation, congestion, poverty, housing, urban renewal, and zoning.

ECON 393 Economics of Uncertainty (3 credits)

Prerequisite: ECON 201, 203, 222. This course focuses on the basic rules governing the application of statistical concepts such as means, variances, covariances, to the economic aspects of the problem of uncertainty. Applications in microeconomic analysis include economic aspects of insurance as well as issues in finance such as portfolio selection, efficient markets, and the capital-asset pricing models. Applications in macroeconomics include the analysis of business cycles and problems associated with the characterization of expectations as in models of inflation.

NOTE: Students who have received credit for this topic under an ECON 398 number may not take this course for credit.

ECON 396 Natural Resource Economics (3 credits)

Prerequisite: ECON 201, 203. This course focuses on the problems of the finiteness of the natural resources base in Canada and in the world, and on an analysis of the demand for and supply of natural resources and energy. The course also discusses the economic aspects of a selected group of conservation measures (financial incentives, reallocation of property rights, regulation).

ECON 397 Economics of Gender (3 credits)

Prerequisite: ECON 201, 203. This course considers a variety of topics about men and women in the Canadian economy. Its main objective is to provide the student with economic tools for analysing the numerous complex issues surrounding the relative economic status of men and women, especially in the labour market. The course covers various theoretical and empirical aspects of what has come to be popularly known as the "economics of discrimination" or the "economics of gender". Particular emphasis is placed on the relations among theoretical economic frameworks, their (Canadian) empirical counterparts, and public policies. While international comparisons are made, the main emphasis is given to the situation in Canada.

ECON 398 Selected Topics in Economics (3 credits)

ECON 399 Selected Topics in Economics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ECON 401 Advanced Microeconomic Theory (3 credits)

Prerequisite: ECON 302, 326. Selected topics in microeconomic analysis including methodology, general equilibrium analysis, welfare economics; theory of the firm, factor pricing, and income distribution capital theory. Primarily for Major, Specialization, and Honours students.

ECON 403 Advanced Macroeconomic Theory (3 credits)

Prerequisite: ECON 304, 326. Selected topics in macroeconomic analysis including construction of models of the economy encompassing the labour, product, and financial markets; the role of monetary and fiscal policies; classical, Keynesian, and post-Keynesian models. Primarily for Major, Specialization, and Honours students.

ECON 405 *Welfare Theory* (3 credits)
Prerequisite: ECON 302, 304. This is an advanced course intended primarily for Honours students. The course is devoted to an examination of selected topics in contemporary welfare economics and its applications.

ECON 409 History of Early Economic Thought (3 credits)

Prerequisite: ECON 302, 304. This course covers the evolution of economic thought from the Greek philosophers up to (and including) Classical economics. It seeks to provide the student with an outline of the development of economic analysis in this period.

NOTE: Students who have received credit for ECON 408 may not take this course for credit.

ECON 410 History of Modern Economic Thought (3 credits)

Prerequisite: ECON 302, 304. This course covers the evolution of economic thought from the Historical School to modern controversies in economic reasoning, which includes a comparative treatment of Keynesian economics and Monetarism.

NOTE: Students who have received credit for ECON 408 may not take this course for credit.

ECON 413 Economic Growth and Fluctuations (3 credits)

Prerequisite: ECON 304. A review of some theories of causes of economic fluctuations. Discussion of the economic climate and of stabilization policies.

ECON 414 Economic Development: Policy Analysis (3 credits)

Prerequisite: ECON 302, 304. This course offers an advanced treatment of selected topics related to issues in economic development. Particular emphasis is placed on models of growth and structural change, such as the two-gap model, input-output analysis, and computable general equilibrium models. Trade and industrial policies, fiscal and financial policies, as well as public-sector policies including taxation, spending, and cost-benefit analysis are also discussed.

NOTE: Students who have received credit for ECON 312 or 411 may not take this course for credit.

ECON 421 Econometrics I (3 credits) Prerequisite: ECON 222, 326. This course develops the simple and multiple classical regression models. The problems of misspecified structures, multi-collinearity, and forecasting are also presented.

ECON 422 Econometrics II (3 credits) Prerequisite: ECON 421. This course is a continuation of ECON 421. It deals with the problems of random-error correlation, stochastic regressors, and the simulation and the estimation of multiple-equation models.

ECON 423 Applied Econometrics (3 credits)

Prerequisite: EČON 302, 304, 324, 325. This course is designed to enable students to apply econometric techniques through computer analysis of case studies in model building. Topics include the analysis of aggregate consumption, construction of price indices, the estimation of production and expenditure functions, estimation and forecasting with univariate time series processes, an application with discrete dependent variables.

ECON 425 Mathematics for Advanced Study in Economics (3 credits)

Prerequisite: ECON 302, 304, 326. This course gives students the requisite mathematical background for graduate studies in economics. Topics include algebraic methods, and static and dynamic optimization techniques needed for the study of economic theory and econometrics. Difference and differential equations are also examined.

ECON 428 Optimization Techniques (3 credits)

Prerequisite: ECON 302, 304, 326. This is an advanced course for Honours students, and for Specialization and Major students with the consent of the Department. Topics include linear programming and input-output analysis; basic concepts and solutions of linear programming, its application to optimum resources allocation; exposition of basic inter-industry theory within the framework of input-output techniques; its applications to structural analysis.

NOTE: Only three credits will be awarded from ECON 428 and DESC 416.

ECON 432 Advanced Monetary Theory (3 credits)

Prerequisite: ECON 302, 304, 331. The nature of the monetarist-Keynesian controversy and critical appraisal of the IS-LM-AS model. Special topics: theory and evidence of term structure of interest rates, post-Keynesian demand for and supply of money in aggregative and disaggregative economic models. Theory of macroeconomic policy. Transmission mechanisms, policy coordination, lags, international constraints, and other problems.

ECON 435 Advanced Public Finance (3 credits)

Prerequisite: ECON 302, 304. In this course, several key areas in public finance are dealt with in depth. Topics covered are selected from the following: public goods and externalities, cost-benefit analysis, pricing policy of public enterprises, structure of commodity taxation, structure of income taxation, issues in tax reform, and intergovernmental fiscal relations.

ECON 442 International Economics: Trade Theory (3 credits)

Prerequisite: ECON 302. The basis of international trade, gains from trade, factor-price

equalization, the tariff, Canadian commercial policy, trade and development, economic integration.

ECON 443 International Economics: Finance (3 credits)

Prerequisite: ECON 304. This course is an introduction to theory of national income determination in open economies with capital mobility. It includes analyses of balance of payments, exchange rate, and the role of monetary and fiscal policies under different exchange rate regimes. Among other issues covered are international policy coordination, optimum currency areas, and features of the international monetary system.

ECON 450 Advanced Economic History (3 credits)

Prerequisite: ECON 222, 302, 304. Advanced topics in economic history, with emphasis on the application of economic theory to specific historical questions.

ECON 461 Industrial Organization (3 credits)

Prerequisite: ECON 222, 302. This course examines departures from the perfect competition paradigm to analyse economic behaviour in an industrial setting. An industry consists of a number of firms which interact strategically to maximize their profits. Topics addressed include measures of market structure, theories of oligopoly, effects of potential entry, product differentiation and advertising, technological change, vertical integration, and monopoly and merger issues.

ECON 462 The Corporate Economy (3 credits)

Prerequisite: ECON 302. This course investigates the nature and behaviour of the firm. Economic rationalizations are presented for organizing production within a firm. The economic effects of various organization structures are examined. Topics addressed include team production, contractual models of the firm, principal-agent theory, tournaments, and the relationship between managers, shareholders, and the outside market.

ECON 463 Economics of Regulation (3 credits)

Prerequisite: ECON 302. This course is devoted to an examination of the economic aspects of governmental regulations. Besides a critical review of the economic theories of regulation, the spectrum of the existing regulatory network, and empirical investigations aimed at discerning cost-benefits, the course focuses on the process of regulatory reforms in all aspects of the Canadian economy.

ECON 464 Game Theory, Information, and Economic Modelling (3 credits)

Prerequisite: ECON 221, 302, 325. This course

covers topics in non-cooperative game theory and information economics such as dominance, Nash equilibrium, subgame perfection, repeated games, bayesian equilibrium, sequential equilibrium, signalling, bargaining, auctions, moral hazard, adverse selection, and bounded rationality. The course focuses on applications, such as auditing games, nuisance suits, product quality, lemons models, entry deterrence, insurance models, winner's curse, innovation and patent races. NOTE: Students who have received credit for this topic under an ECON 498 number may not take this course for credit.

ECON 473 Economics of Socialism (3 credits)

Prerequisite: ECON 302. This course analyses the theoretical aspects of various types of socialist economies: market, centrally planned, and worker-managed. Definitions and models of the various forms are developed and compared with a capitalist model and with existing socialist economies such as those of Cuba, China, Yugoslavia, and the U.S.S.R.

ECON 481 Advanced Labour Economics (3 credits)

Prerequisite: ECON 302, 304. Advanced topics in labour economics with special emphasis on labour-market problems and policies in Canada. Topics include the theory of work-leisure choice, mobility and immigration, unemployment and unfilled vacancies, income distribution, labour-market information and the wage-price relationship.

ECON 482 Advanced Industrial Relations (3 credits)

Prerequisite: ECON 302, 304. This course covers an advanced treatment of policy issues related to the human and industrial relations system in Canada. Topics covered include functional income distribution, conflict resolution in Canada and selected countries, trade agreements and labour relations, union response to technology; the social contract and concession bargaining; and industrial democracy and the quality of work life. Labour-management experiences of other countries are used as basis for comparison. NOTE: Students who have received credit for ECON 383 or 498D may not take this course for credit.

ECON 491 Advanced Environmental Economics (3 credits)

Prerequisite: ECON 302. This course provides a survey, from the perspective of economics, of public issues regarding the use of environmental resources, ecosystems and the management of environmental quality. The course covers both

conceptual and methodological topics with recent and current applications. It begins with an introduction to the theory and methods of environmental and natural resource economics and concepts of sustainable development. Then the emphasis is shifted to the optimal use of natural resources, both non-renewable resources (mineral and energy) and renewable resources, and the valuation of environmental resources. In the last part of the course, we examine national and international environmental policy issues, including intergenerational equity and environmental ethics.

ECON 493 Regional Economics (3 credits) Prerequisite: ECON 302, 304. This course introduces the student to the methods and techniques of regional economic analysis, and their application to the problems of regional economies within Canada. Among the microeconomic topics covered are the location behaviour of firms and households, and the factors determining the allocation of land among alternative competing uses. Macroeconomic topics include the measurement and analysis of regional income and growth levels, cyclical changes in those levels, and interregional differences in growth rates. Policy problems pertinent to Canadian regions are stressed throughout the course.

ECON 495 Economics of Transportation and Communications

(3 credits)

Prerequisite: ECON 302. Congestion problems and solutions, pricing, costs, demand, and regulation in transportation. Some applications to communications.

ECON 497 Income Distribution and Economic Inequality (3 credits)

Prerequisite: ECON 302, 304. This course examines the extent and dimensions of economic inequality among households both domestically and internationally. Topics covered include theories of income inequality, wealth inequality, recent trends in polarization, poverty, intergenerational bequests, the welfare state, and the role of government economic policy.

ECON 498 Advanced Topics in Economics (3 credits)

ECON 499 Advanced Topics in Economics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.090

EDUCATION

Faculty

RICHARD F. SCHMID, Associate Professor

Professor Emeritus HAROLD ENTWISTLE

Professors PHILIP ABRAMI **ROBERT BERNARD GARY BOYD ELLEN JACOBS** RONALD A. SMITH SANDRA WEBER

Associate Professors JOYCE BARAKETT LOIS J. BARON PAUL BOUCHARD BETTE CHAMBERS

AILIE CLEGHORN MIRANDA D'AMICO DENNIS J. DICKS **GEOFFREY FIDLER** ARPI HAMALIAN NINA HOWE WILLIAM KNITTER JOANNE LOCKE LARRY PROCHNER STEVEN SHAW

Assistant Professors MEI CHEN HEIDI SCHNACKENBERG

Lecturers SARA WEINBERG DAVID WELLS

Location

Sir George Williams Campus J.W. McConnell Building, Room: LB 579 (514) 848-2004

Department **Objectives**

The mission of the Department of Education is to provide responsible and innovative leadership in developing and disseminating knowledge about education. In training students to teach, the emphasis is not only on sound pedagogical principles and approaches, but also the values of equality, diversity, and non-discrimination.

Programmes

(For Adult Education, see §31.090.1)

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

The 42-credit Major in Information Studies consists of 30 Information Studies (INST) credits, nine Education (EDUC) credits, and three Interdisciplinary Studies (INTE) credits. The curriculum focuses on the creation, organization, retrieval, distribution, and utilization of information together with its relationship to learning.

Information Studies students must take the core curriculum of 42 credits required for a Major in Information Studies. In addition, students are encouraged, with the permission of the Information Studies Programme, to combine the core curriculum with a departmental Major programme. It should be noted that in addition to completing the Information Studies Major, students must meet the Faculty of Arts and Science degree requirements set forth for the second programme of study. The core curriculum component of the Information Studies Major may not count for credit within the core requirements of the selected second Major, and vice versa.

42 **BA Major in Information Studies** Stage I

INST 212³, 220³, 260³, 280³ 12

EDUC 210⁶, 230³ *3 or 6 Stage II

INST 290³, 320³, 330³, 350³ 12

INTE 2963** Stage III

INST 420³, 430³ EDUC 230³, 422³, 426³, 440³ *3 or 6

*Students must complete a total of nine EDUC credits, three or six in Stage I and three or six in

**Any equivalent three credits satisfy this component of the programme. See §200.7.

Minor in Education

Chosen from EDUC 201⁶, 210⁶, 230³, 241³, 305³, 306³, 317³, 321³, 324³, 398³, 399⁶, 405³, 416³, 417³, 422³, 423³, 426³, 427³, 428³, 429³, 440³, 442³, 450³, 454³, 498³, 499⁶

120 **BA Specialization in Early Childhood** and Elementary Education

Group A ARTE 2013; EDUC 2106, 2113, 2223, 2603, 262³, 264³, 271³, 272³, 301³, 371³, 373³, 375³, 380³, 381³, 382³, 387³, 388³, 400³, 445³, 450³, 454³, 473³, 474³, 475³, 476³

- 12 Group B Chosen from EDUC 230³, 305³, 321³, 383³, 385³, 389³, 405³, 422³, 423³, 426³, 427³
- 27 Group C
 Students must also take a minimum of
 27 credits outside the Department of
 Education

NOTE 1: This programme is open to full-time students only. In addition to the application submitted to the University, Specialization applicants MUST complete an additional application which may be obtained from the Early Childhood and Elementary Education secretary. NOTE 2: Upon successful completion of the BA Specialization in Early Childhood and Elementary Education programme and application to the Student Service Centre, students may be recommended to the Québec Teachers Certification Service for a Québec teaching permit, valid for teaching kindergarten and grades 1–6.

To remain in the Early Childhood and Elementary Education Specialization programme and to be recommended for certification, students must:

- achieve at least a "B" grade in each of the following practicum courses: EDUC 271, 272, 371, 373, 375, 473, 474, 475, 476; and
- achieve at least a "C+" grade in each of the following methods courses: EDUC 222, 301, 380, 381, 382, 383, 385, 387, 388, 389.

Students who obtain a grade that is below the above required level will be placed on conditional standing within the programme and will be so informed in writing. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see §16.3.12.)

Students who fail to achieve the above minimum grades in two internships/methods courses (i.e. failing the same internship/methods course twice or two different internships/methods courses) will be required to withdraw from the Early Childhood and Elementary Education Specialization programme (see §16.3.12). NOTE 3: Students who intend to teach Catholic religious and moral instruction are advised to take EDUC 383 or 389 in addition to THEO 201, 204, or 210.

- 42 BA Major in Child Studies
- 18 EDUC 210⁶, 211³, 260³, 262³, 374³
- 12 Chosen from EDUC 305³, 306³, 317³, 405³, 416³, 417³, 490³, 491³, 498³, 499⁶
- 6 Chosen from EDUC 230³, 241³, 321³, 324³, 422³, 423³, 426³, 427³, 428³, 429³, 440³
 - Chosen from a cognate discipline (courses to be designated)

CERTIFICATE IN EDUCATION*

The Department of Education offers a 30-credit programme leading to the Concordia University Certificate in Education and certification from the Provincial Department of Education.

NOTE: This programme is restricted to individuals presently employed in a recognized educational institution in Québec and holding a provisional teaching authorization.

Admission Requirements

- 1. Evidence of full-time employment with a recognized institution in Québec.
- Possession of a Québec provisional teaching authorization. Admission limited.

Courses

EDUC 201⁶ EDUC 445³ EDUC 471⁶ EDUC 471⁶

either EDUC 480³, 481³, or an equivalent course in teaching methodology. Six additional undergraduate credits in Education chosen in consultation with the director of the programme.

Students may transfer into the Certificate programme up to 12 credits earned in an incomplete degree or Certificate programme or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

NOTE:

- The student must meet the minimum scholarity requirements set by the Provincial government before being recommended for certification. See the conditions for certification following the BA Specialization in Early Childhood and Elementary Education above.
- 2. This programme is not open to teachers of vocational subjects.

For other programmes which may be of particular interest to teachers, see §23.

^{*}Admission suspended for 2000-01.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Education

The Nature and Function of Teaching (6 credits)

An introduction to the purpose, theories, and methods of teaching.

EDUC 210 Psychology of Education (6 credits)

This course introduces students to a broad range of content in educational psychology, including its scope and methods, learning motivation, growth and development, adjustment, individual differences, guidance, and concept of self.

EDUC 211 Child Development (3 credits)
Prerequisite: Enrolment in Early Childhood and
Elementary Education Specialization, or Major in
Child Studies. This course provides an overview of the social, emotional, cognitive, and
physical development of children from birth to
age 12 and an in-depth examination of selected
critical issues. The implications of developmental
needs in relation to preschool elementary education are discussed.

EDUC 222 Exploring Movement with Children (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization. From a multi-disciplinary perspective, this course examines the following topics: the relationship between movement and self-knowledge, psychomotor development, and the role of physical activity in primary education. The course addresses the teacher's role in incorporating movement into the curriculum for all children, including those with special needs through the use of specific techniques and activities.

EDUC 230 Introduction to Philosophy of Education (3 credits)

This course introduces the student to the content and form of several major educational theories, and to conceptual and logical procedures of philosophizing about education, with particular reference to teaching and learning.

EDUC 241 Education in Western Civilization (3 credits)

An introduction to selected major thinkers and systems of thought in (and impinging on) education from Antiquity to the twentieth century. Emphasis is placed on thought and practice in the context of significant cultural, socio-economic, political, and religious developments.

NOTE: Students who have received credit for EDUC 441 may not take this course for credit.

EDUC 260 Historical and Philosophical Foundations of Early Childhood Education (3 credits)

Prerequisite: Thirty credits or permission of the

Department; enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies. This course is an introduction to the historical and philosophical foundations of early childhood education. The development of institutions for the care and education of young children is discussed in relation to changes in the family, concepts of childhood, and educational theories. Students use methods of historical and philosophical inquiry to examine current issues in early education, including school readiness, early literacy, integration, multiculturalism, and public policy. The objective is to provide students with the basis for identifying and critiquing problems in education.

EDUC 262 The Family and the Child (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies. Students are introduced to developmental, psychological, and sociological aspects of the child and family. Emphasis is placed on the diversity of family structures, the transition to parenthood, child-rearing patterns, and the relationship between home and school. Problems and issues of the family, such as divorce, child and spouse abuse, dual-worker families are also addressed.

EDUC 264 Communication: Child, Parent and Teacher (3 credits)

Prerequisite: Thirty credits or permission of the Department; enrolment in Early Childhood and Elementary Education Specialization. This course focuses on the role parents play in the various stages of the child's academic, social, and emotional development. The format for this course is unique in that parents of the children in our observation nursery are involved, and students interact with them by conducting and participating in parent-teacher seminars. Topics include parenting, the impact of the family on the child's classroom behaviour, child abuse, cultural issues, disciplinary measures at home and in school, the coordination of home-andschool academic goals, and achievement motivation.

EDUC 271 Practicum I: Early Childhood Teaching (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; students must be enrolled in EDUC 272 in the same semester. This practicum gives students first-hand knowledge of the importance and implications of the links between daycare and schooling. It permits students to develop preliminary skills in observing, assessing, and meeting the needs of individual children, articulating educational objectives, working effectively with small groups, and planning and implementing a

play-based curriculum. Students are placed in an early childhood setting one day a week for a total of 84 hours.

EDUC 272 Early Childhood Teaching Seminar (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; students must be enrolled in EDUC 271 in the same semester. This course supports EDUC 271 by offering a thorough introduction to theoretical and applied aspects of early childhood education through a weekly seminar consisting of lectures, discussions, and video presentations on such topics as the educational and developmental needs of young children, models of education, the role of the teacher, the relationships between daycare and schooling, play-based curriculum and instruction, health and safety issues, and the design of appropriate learning environments.

EDUC 298 Selected Topics in Education (3 credits)

EDUC 299 Selected Topics in Education (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EDUC 301 Integrating Computers into the Elementary Classroom

(3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization. This course provides an introduction to theoretical and practical knowledge regarding the use of computers in elementary school classrooms. Assignments are designed to provide students with hands-on experience with the computer. Topics include social interaction and equity, problem-solving skills, software evaluation, interactive technologies, and curriculum planning.

NOTE: Students are expected to have some basic computer skills (at least wordprocessing) prior to enrolling in this course. Students with no previous experience in using computers are advised to take INTE 290 before enrolling in this course.

EDUC 305 Technology for Educational Change (3 credits)

This course provides an introduction to salient advances in the theory, research, and practice of educational technology. The following topics are typically covered: traditional media survey, systems approach and instructional design, origins of information explosion, computer technologies of instruction (e.g. interactive video), distance education, and trends in educational technology research and evaluation.

EDUC 306 Computers and Computing in Education (3 credits)

Prerequisite: INTE 290, or permission of the

Department. This course is an introduction to educational computing. Topics covered include the evaluation and selection of instructional software, and using the computer as a tool for processing information with existing applications (e.g. spreadsheets, databases, authoring languages, graphics) in an educational context. Laboratory work outside the class (IBM-PC or compatible).

EDUC 317 The Urban Child (3 credits) This course concentrates upon the life of the inner-city child and the concomitant influences upon their development in and out of the classroom. Students are instructed in how to view the urban area from the child's perspective, through field assignments in inner-city schools or recreation centres. Lectures by social workers, police officers of the youth section, legal aid counsellors, and inner-city teachers heighten the awareness of students to the environment in which the inner-city child lives.

EDUC 321 Sex Role Socialization in the School (3 credits)

This course focuses upon how children at the elementary- and secondary-school level are socialized for different work roles, and how work segregation has occurred on the basis of this process. The role of schools and curriculum is examined in relation to cultural changes in social roles.

EDUC 324 Patterns of Educational Culture (3 credits)

This course is an introduction to the variety of cultural settings in which formal schooling and informal education socialization take place. The cultural milieu of education, both inside the classroom and outside, in the family, the neighbourhood, the market-place, and the political arena is the focus of readings and lectures. The aim of this course is to immerse the student in the concepts of anthropology and education in the broadest sense. It is hoped that students become sensitized to the concept of culture, cultural assimilation, enculturation, socialization, informal, non-formal, and formal educational systems, open and closed societies, and crosscultural comparison.

EDUC 371 Practicum II: Classroom Interaction Dynamics (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 271, 272. This course is designed to encourage both systematic and anthropological observation of children in large and small groups in the classroom. Interaction between the child and the teacher as well as peer group interaction are examined. Sociolinguistics, verbal and non-verbal communication, and teacher expectations are topics covered. The purpose of this course is to heighten students' awareness of effective communication strategies and classroom interaction patterns.

Classroom observation and student participation are the means by which topics are handled in the course. Students conduct guided observations in recognized educational institutions (45 hours) to learn about classroom interactions under the supervision of the course instructor.

EDUC 373 Practicum III: Observation, Evaluation and Analysis of Teaching (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 271, 272; students must be enrolled in EDUC 375 in the same semester. Students are given the opportunity of observe, evaluate, and implement age appropriate curricula in recognized educational institutions (K-6; 32 hours). They develop teaching skills which include effective questioning techniques, classroom management, activity planning, and self-evaluation. In this internship, students are required to perfect these skills by means of videotaping their teaching. The tapes are reviewed and discussed in class with the course instructor and fellow students.

EDUC 374 Child Studies Practicum (3 credits)

Prerequisite: 30 credits in the Major programme. This course is designed to provide students with training in observation and evaluation procedures. Students study children in a variety of child-oriented environments and programmes. Instruction focuses on evaluative methodology, e.g. observational methods and interactional analyses. Students are required to complete a one half-day per week internship in addition to the regularly scheduled class time. Appropriate field placements for this course include recreation/community centres, hospitals, daycare centres, libraries, museums, fine arts centres.

NOTE: Students who have received credit for EDUC 371 may not take this course for credit.

EDUC 375 Observation, Evaluation and Analysis of Teaching Seminar (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 271, 272; students must be enrolled in EDUC 373 in the same semester. This course supports EDUC 373 in that it focuses on the development and evaluation of curricula and the appropriateness of various classroom management techniques. Students learn how to conduct a diagnostic observation to create a dynamic profile of the child and how to prepare evaluation reports for parent-teacher communication. Students meet to discuss internship experiences, teaching philosophies, evaluation techniques, and to exchange information about programme implementation.

EDUC 380 Teaching Language Arts I (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Speciali-

zation. This course enables students to acquire the necessary skills for developing a stimulating and appropriate language arts programme for kindergarten and primary grades. Current theories of literacy development and implications for planning and instruction are addressed. The course focuses on listening, speaking, reading, and writing, emphasizing the integration of language arts activities into other subject areas.

EDUC 381 Teaching Language Arts II (3 credits)

Prerequisite: 30 credits including EDUC 380; enrolment in Early Childhood and Elementary Education Specialization. This course is a continuation of EDUC 380 with special emphasis on teaching language arts in grades 3–6. Students become familiar with MEQ programme guidelines, and various ways to organize and evaluate their implementation.

EDUC 382 Teaching Science Concepts in the Elementary Classroom (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course examines areas of science which are relevant to elementary education and emphasizes the development of the spirit of scientific enquiry. Resource materials, teaching methodology, and classroom activities are examined and evaluated in light of the MEQ guidelines. Assignments emphasize developing activities for classroom use.

EDUC 383 Promoting Moral and Spiritual Attitudes and Values in Young Children (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to introduce the early childhood teacher to the various issues involving the development of moral judgement and reasoning in the young child. Cultural, social, cognitive, and emotional factors influencing the growth of morality are discussed. The major focus is on examining methods and techniques to enhance the personal development of positive social behaviours (i.e. helping, sharing, caring, etc.) in preschool and primary level children.

EDUC 384 Exploring the Human Sciences with the Preschool and Primary Age Child (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course examines the teaching of the human sciences to young children.

EDUC 385 Teaching a Second Language to Elementary School Children (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to give teachers a background in current theories of language acquisition and second language learning. Teaching methodologies such as immersion, enrichment, and core/complementary curricula are studied and resource materials are examined and evaluated. Assignments include the development of appropriate classroom activities at the elementary level.

EDUC 387 Teaching Mathematics I (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. Programmes and methodologies for teaching numerical concepts typically acquired by the preschooler and the primary child are studied and evaluated. Relevant resource materials are examined and assignments focus upon development of activities for the classroom.

EDUC 388 Teaching Mathematics II (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course concentrates on topics such as geometry, classification, measurement, mathematical language, and the use of the calculator according to the MEQ elementary mathematics programme guidelines. The use of manipulative aids in instructing children is explored and illustrated. Relevant resource materials are examined and assignments focus upon the development of activities for classroom use.

EDUC 389 Catholic Moral and Religious Teaching in the Context of Québec Schools (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to provide early childhood educators with the skills to develop a programme of Catholic moral and religious instruction within the context of Québec schools. The school curriculum, resource materials, and teaching methodologies for the primary and preschool child are studied.

EDUC 398 Selected Topics in Education (3 credits)

EDUC 399 Selected Topics in Education (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EDUC 400 Teaching Across the Curriculum (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; EDUC 380. Using language arts and the social sciences as the starting point, this course outlines different models for integrating school subjects in curriculum programming. Special attention is given to social science methodology, thematic planning and project work, and to the use of

literature and drama. Students examine the links between the different programmes of study developed for Québec schools by the MEQ, and their overall implications for curriculum planning.

Television in the Lives of Young Children (3 credits)

Prerequisite: 30 credits. This course examines the effects of television on children from a cognitive-developmental perspective. Learning theory, production techniques, cognitive theory (information processing) are the basis around which the communication process between the child and the media is examined. Both the positive and negative effects of television on children are considered. The concept of media literacy and classroom use of television is also discussed.

EDUC 416 Education of the Gifted (3 credits)

Prerequisite: EDUC 210. This course discusses the special educational problems of gifted children. It also assesses the effectiveness of the techniques usually employed to deal with these problems.

EDUC 417 Education of the

Disadvantaged Child (3 credits) Prerequisite: 30 credits. This course deals with issues associated with teaching disadvantaged children. Social, emotional, cognitive, and familial problems are discussed and techniques for coping with these problems are presented.

EDUC 422 Sociology of Education I (3 credits)

Prerequisite: 30 credits. This course emphasizes sociological concepts and their application to the study of schooling. The focus is on the education system in relation to familial, economic, and political aspects and how these affect social class differentials in educational achievement and social status position.

NOTE: Students who have received credit for EDUC 421 may not take this course for credit.

EDUC 423 Sociology of Education II (3 credits)

Prerequisite: EDUC 422. This course considers how a particular sociological viewpoint contributes to our understanding of school life. Topics include family, socialization patterns, teacher and pupil perspectives, and how these are interrelated.

NOTE: Students who have received credit for EDUC 421 may not take this course for credit.

EDUC 426 Comparative Education I (3 credits)

Prerequisite: Six credits in Education. This course undertakes the study of the impact of political and cultural differences upon educational systems (for example, the impact of language differences, nationalism, colonialism, neocolonialism, political socialization). The approach is comparative, with particular emphasis on contrasting educational systems

and practice in Western nations (Canada, the United States, United Kingdom, or Western Europe); Russia; and China or other Third-World nations.

EDUC 427 Comparative Education II (3 credits)

Prerequisite: Six credits in Education. This course examines the sources and impacts of educational change from a comparative perspective. Topics include pedagogical alternatives; socio-political alternatives; educational implications of technological change and economic policy; policies of elitism and egalitarianism. Methods include comparative case study and analysis of specific theories of educational innovation.

EDUC 428 Philosophy of Education: Concepts and Issues (3 credits)

Prerequisite: Three credits at the university level in Philosophy, or EDUC 230. The course considers the application of philosophical method to aspects of educational theory or practice, e.g. educational aims, teaching methods, concepts which occur in educational discourse, or educational controversies.

EDUC 429 Philosophy of Education: Educational Philosophers and Movements (3 credits)

Prerequisite: Three credits at the university level in Philosophy, or EDUC 230. The course undertakes the study of a philosopher or school of philosophy whose works include significant educational reference or implication: e.g. Plato, Aristotle, Rousseau, Dewey, Marxism, utilitarianism, modern analytical philosophy.

EDUC 431 Honours Essay in Education (6 credits)

Open to third-year students in Honours in Education and Philosophy (or to others by permission of the Department).

EDUC 432 Seminar in Epistemology and Education (3 credits)

Prerequisite: EDUC 428 or 429, or permission of the Department. Theories of knowledge are considered in this course, with special attention being given to the bearing of such topics as perception, evidence, truth, knowledge, and belief as relating to educational thought and practice. Students are expected to become familiar with recent periodical and other literature in the field.

EDUC 433 Seminar in Ethics and Education (3 credits)

Prerequisite: EDUC 428 or 429, or permission of the Department. This course examines the principles and methods of moral justification in education. They are referred to the writing of main authors and recent periodical literature.

EDUC 434 Seminar in Aesthetics and Education (3 credits)

Prerequisite: EDUC 428 or 429, or permission

of the Department. The nature of aesthetic value and experience, and theories of art and beauty are examined. The development of the emotions and imagination, and their functions in aesthetic awareness are central concerns of this course. Students are expected to become familiar with the relevant literature in the field.

EDUC 435 Seminar in Philosophy and Education (3 credits)

Prerequisite: EDUC 428 or 429, or permission of the Department. This is an advanced seminar in philosophical analysis and theory, in which students present papers on, and conduct discussions about, educational concepts, aims, and practices. Students are expected to become familiar with the periodical and other literature in the areas under discussion.

EDUC 440 History of Education, Thought and Practice (3 credits)

Prerequisite: 30 credits. This course focuses on a selected theme, school of thought, or movement in education and educational thought such as the education libertarians from Rousseau to Holt, the evolution of the curriculum, the origins of public education.

NOTE: Students who have received credit for EDUC 441 may not take this course for credit.

EDUC 442 *Education in Canada* (3 credits) Prerequisite: Six credits in Canadian history. It is advisable that students have a reading knowledge of French. This course studies the history of Canadian education and, more particularly, the history of education in Québec.

EDUC 445 Education in Québec (3 credits)
Prerequisite: 30 credits in a teacher certification
programme, or holder of a provisional teaching
authorization, or permission of the Department.
This course covers the history, the contemporary movements, and the structures of Québec
education. The historical section covers the
period from 1608 until the present. Topics
included are the legislation, regulations, rules,
and directives pertaining to the respective roles
of the Ministry of Education, the school boards,
the teachers, the parents, and the students in
Québec's educational system.

NOTE: Because this is a required course for all individuals enrolled in a Québec programme of teacher training, the content is controlled by the Ministry of Education.

EDUC 450 The Inclusive Classroom: Educating Exceptional Children (3 credits)

Prerequisite: 30 credits including EDUC 210 or 211. This course focuses on the education of children with special needs. Emphasis is placed on ways in which classroom teachers can provide appropriate help or instruction to meet the needs of exceptional children. Topics include identification and assessment of learning needs; adaptation of curriculum and activity design,

service delivery models; parent-professional relationships; legislative policies.

EDUC 454 Diversity in the Classroom (3 credits)

Prerequisite: 30 credits including EDUC 210 or 211. Students examine the implications of diversity in the classroom for teaching, curriculum, and children's educational experience. Various theoretical approaches are analysed, including critical pedagogy, multicultural education, and intercultural education. The importance of inclusive curricula is discussed.

EDUC 471 Supervised Internship (6 credits)

This course is offered only to students enrolled in the Certificate in Education programme. Teaching internship is carried out in the school where the student is employed. The students are supervised and their teaching performance evaluated. The students are expected to demonstrate positive evidence of teaching competence and professional behaviour.

EDUC 473 Practicum IV: Kindergarten/ Primary Teaching (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 371, 373, 375; students must be enrolled in EDUC 474 in the same semester. This internship is a twelve-week (300 hours) supervised student-teaching experience in a full-day kindergarten and/or primary classroom. Students share in the daily work of their cooperating teachers, and progress gradually from being participant observers working with small groups to taking charge of the whole class as independent, creative practitioners. Students perfect their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines.

EDUC 474 Kindergarten/Primary Teaching Seminar (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 371, 373, 375; students must be enrolled in EDUC 473 in the same semester. This seminar complements EDUC 473 by providing the opportunity, means, and impetus for students to reflect critically on their teaching philosophy and practice. Topics include the development of appropriate and stimulating learning environments, MEQ kindergarten and primary programme guidelines, planning and implementation of learning centres, teaching the "whole" child, teacher-parent relationships, and other current issues in primary education.

EDUC 475 Practicum V: Elementary Teaching (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 473, 474; students must be enrolled in EDUC 476 in the same semester. Students are placed in an elementary classroom

(grades 3–6) for an eight-week (200 hours) supervised student-teaching assignment. The internship provides students with further opportunities to develop advanced skills in curriculum planning and implementation, preparing and evaluating appropriate materials, monitoring student progress, and the individualization of instruction. A further aim of the internship is to promote the development of the student's own teaching style, and skills in self-evaluation.

EDUC 476 Elementary Teaching Seminar (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 473, 474; students must be enrolled in EDUC 475 in the same semester. This seminar supports and complements EDUC 475. Its purpose is to discuss, review, and analyse relevant classroom issues in the context of the teaching-learning environments in which the students are working. Topics include inclusivity, diversity in the classroom population, curriculum development, involvement of parents in their children's education, and the facilitation of pro-social behaviour in the elementary school child. This course uses small group discussions, films, analysis of case studies, and student presentations.

EDUC 480 Special Methods of Teaching — Elementary (3 credits)

This course is offered only to students enrolled in the Certificate in Education programme. It deals with methods of teaching in the elementary school. Emphasis is placed on the practical application of educational theories.

EDUC 481 Special Methods of Teaching — Secondary (3 credits)

This course is offered only to students enrolled in the Certificate in Education programme. This course deals with methods of teaching in a high school subject. The course is designed to suit the individual student's field of specialization.

EDUC 490 Children with Health Problems and Handicaps I (3 credits)

Prerequisite: EDUC 211 or equivalent; 30 credits in Education, or permission of the Department. This course offers a theoretical and practical introduction to the challenges facing children who have various disabilities or chronic illnesses. The course addresses the question: how can families, educators, and others work towards the goal of equitable opportunity for these children? Topics include attitudes, the normalization principle, education, and life in the mainstream.

EDUC 491 Children with Health Problems and Handicaps II (3 credits)

Prerequisite: EDUC 490, or permission of the Department. This course is an exploration of children's experiences with illness, disability and health or medical care, and specific interventions which can foster coping, healthy development, and family well-being. Topics include cognitive and emotional preparation for stress-provoking

events, the therapeutic use of play, creative expression, and special literature for children and youth. Laboratory work outside the class is required.

EDUC 498 Advanced Topics in Education (3 credits)

EDUC 499 Advanced Topics in Education (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Information Studies

INST 212 Information in Society

(3 credits)

This course provides a theoretical and historical introduction to topics such as the nature and definition of information, its role in society and the economy, how technology has impacted on the accessibility, distribution, and use of information and information policy. Basic concepts and vocabulary, an introduction to the information professions and the literature of the field are covered.

INST 220 Introduction to Information-Based Organizations (3 credits)

This course introduces students to basic management and organizational theory and practice within the information-based organization. It focuses on the influence of information on functions at the various organizational levels, and examines the place of the organization within a global economy.

INST 250 Introduction to Library Research Practices (3 credits)

This course is designed to introduce students to basic library research practices. It familiarizes students with a variety of information sources in both print and non-print formats. Emphasis is placed on a systematic search strategy in the use and evaluation of these information tools. Topics such as outlining and bibliographic format are covered as part of the library research process.

NOTE: Students who have received credit for LIBS 250 may not take this course for credit.

INST 260 Organization of Information I (3 credits)

This course covers the theory and principles required to describe and analyse information in print and electronic media. Students review the evolution of various guiding principles and methods employed in the organization of information including international standards and codes. The course focuses on the identification and analysis of the essential descriptive elements common to all types of records, the use of bibliographic utilities and data transfer.

INST 280 Methods of Information Retrieval I (3 credits)

This course examines the theory, concepts, and

skills involved in information storage and retrieval. Emphasis is placed on an understanding of data structures and the organization of information in a variety of print and electronic media. Students focus on the analysis of the problem, selection of appropriate sources, search strategy development, and comparison and evaluation of different types of resources.

INST 290 Database Systems for Information Management

(3 credits)

This course provides an introduction to different types of databases, such as hierarchical and relational, and their corresponding file organization and data structures. Platforms and operating systems are presented. An overview of existing software for each type of database is examined and evaluation criteria for assessing software is included.

INST 298 Selected Topics in Information Studies (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INST 320 Organization of Information II (3 credits)

Prerequisite: INST 260. This course further develops the theory and principles required to describe and analyse information in print and electronic media. Part II focuses on indexing and abstracting principles, classification systems, and subject analysis. It includes comparison and evaluation of various systems according to the subject and format of documents to be analysed. Thesaurus design and construction are covered.

INST 330 Basic Programming for Information Systems (3 credits)

Prerequisite: INTE 291 or equivalent. Programming theory and techniques relevant to information systems are studied. Students are introduced to an object-oriented programming language.

INST 350 Methods of Information Retrieval II (3 credits)

Prerequisite: INST 280. This course covers the theory and application of more advanced concepts in online and Internet searching with special emphasis on Education and complementary disciplines (i.e. Sociology, Psychology, and such). Bibliographic, fulltext and numeric databases are studied. Emphasis is placed on search strategy design and on critical evaluative techniques to analyse the data retrieved. Additional topics include basic telecommunications, communications software, and electronic document delivery.

INST 398 Selected Topics in Information Studies (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INST 420 User Behaviour in the Information Environment (3 credits)

Prerequisite: INST 320, 350. This course examines common information-seeking behaviours of users from a variety of populations such as students, researchers, and practitioners. Topics covered include information-seeking behaviours and use of information resources. Students examine how information channels are selected and used, expectations of and problems encountered by information seekers, and the impact of technologies on the information-seeking process.

INST 430 Theory and Practice of Information Dissemination (3 credits)

Prerequisite: INST 350. Principles involved in

filtering, synthesizing, and presenting information form the basis of this course. Issues such as copyright, plagiarism, and the role of proper documentation are covered. Emphasis is placed on analysing user needs to determine appropriate presentation formats. The course includes the design and execution of several projects with text and graphics using appropriate software.

INST 498 Advanced Topics in Information Studies (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.090.1 Adult Education Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

42 *BA Major in Adult Education

*Admission suspended for 2000-01.

The Department of Education offers a 30-credit Certificate programme and a 24-credit Minor in Adult Education consisting of both required and optional courses: core courses in the foundations of adult education; courses related to functions, skills, and competencies of adult educators in the field of practice; and courses related to some dimensions which constitute the body of knowledge of adult education.

30 Certificate in Adult Education

Certificate Admission Requirements General admission requirements are listed in §13. Applicants will be interviewed prior to admission.

Students must take:

- ADED 201³, 202³
- Chosen from the Adult Education (ADED) offerings
 - Chosen from cognate courses with the permission of the programme director ADED 496³, 497³, Integrative Internships I
 - and II

Students may transfer into the Certificate programme up to 12 credits earned in an incomplete degree or Certificate programme or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

24 Minor in Adult Education

- ADED 2013, 2023 6
- 18 Chosen from Adult Education (ADED) course offerings with the prior approval of the Adult Education coordinator.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ADED 201 Concepts and Principles of Adult Education (3 credits)

This course consists of an overview of the field of adult education as a field of study with emphasis given to its philosophy, objectives, historical development, and the nature of adult learners. It also examines adult education as a field of practice with emphasis given to methods, techniques, roles, and competencies. This course stresses active student participation and self-directedness. NOTE: Students who have received credit for ADED 200 may not take this course for credit.

ADED 202 The Scope and Nature of Adult **Education Programmes**

(3 credits)

This course is designed to help students develop an understanding of the scope and nature of adult education programmes. Emphasis is placed on existing programmes, and institutions and agencies providing them. The course stresses active student participation and self-directedness. NOTE: Students who have received credit for ADED 200 may not take this course for credit.

ADED 220 Adults as Learners (3 credits) This course examines the unique physiological, psychological, and sociological characteristics of adults, their influence on adult learning and development, and their implications for educational intervention. Attention is given to changes which occur at various stages of the adult life cycle, and particularly to the dimensions which affect the adult's self-concept and orientation to learning, the motivations, needs, and interests which cause adults to participate in educational activities.

ADED 230 Roles and Competencies of Adult Educators (3 credits)

The purpose of this course is to review the

state of professionalization of adult education. General skills, knowledge, and attitudes expected of adult educators regardless of the setting in which they work are examined. In addition, according to the participants' needs and interests, an opportunity is given to explore competencies related to the particular roles of, e.g., administrators, programme developers, trainers, leaders, instructors, counsellors, and volunteer workers.

ADED 240 Introduction to Research in Adult Education (3 credits)

This course is designed to introduce students to how to gain access to and utilize major information sources in adult education. In addition, the course examines research interests and problem areas studied in adult education and related fields, along with current trends and various methods of enquiry used.

ADED 298 Selected Topics in Adult **Education** (3 credits)

ADED 299 Selected Topics in Adult **Education** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ADED 333 Methods and Techniques for Facilitating Adult Learning (3 credits)

This course is designed to give adult educators an opportunity to practise and improve their skills in facilitating adult learning. Different models of educational processes and optimal conditions for promoting adult learning are examined; attention is given to case studies, role plays, and simulation methods and techniques, as well as to individualized learning formats.

NOTE: Students who have received credit for ADED 330 or 331 may not take this course for credit.

ADED 344 Design of Adult Learning Projects (3 credits)

The purpose of this course is to assist participants in developing a clear working concept of various models for planning and designing adult learning projects. To facilitate this understanding, the different steps of the process are closely examined and discussed. Participants are given an opportunity to design and conduct a learning activity in the area of subject matter speciality. A systems approach, including methods for evaluating the design of the learning project is emphasized. NOTE: Students who have received credit for

ADED 340 or 341 or 343 may not take this course for credit.

ADED 345 Evaluating Adult Learning Projects (3 credits)

The purpose of this course is to assist partici-

pants in developing a clear working concept of various models for assessing the effectiveness of adult learning projects. The course emphasizes a systematic approach to evaluation, techniques for collecting information and providing feedback to programme operation and impact. Participants are given the opportunity to conduct an evaluation of an adult learning project in the area of subject matter speciality.

NOTE: Students who have received credit for ADED 342 or 343 may not take this course for credit.

ADED 351 Introduction to Administration of Adult Education (3 credits)

This course is designed to develop a better understanding of the principles of organization and administration as they relate to various institutions, government agencies, schools, and hospitals. The course also examines the evolving relationships of administrative theory and practice.

ADED 370 Workshops for Adult Educators (3 credits)

These workshops examine a number of topics and problems related to the field of adult education. The issues considered may differ from year to year and will be stated in the Undergraduate Class Schedule. The workshop format is designed to provide adult educators with learning opportunities that are flexibly scheduled or in the form of a one-week intensive seminar.

ADED 398 Selected Topics in Adult **Education** (3 credits)

ADED 399 Selected Topics in Adult **Education** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ADED 410 Adult Education in Canada and Québec (3 credits)

The purpose of this course is to examine the historical development and current state of adult education in Canada, with special reference to Québec. Various factors which influenced the development of adult education in our society are explored; the focus is on present status, role and structure, and socio-cultural and philosophical underpinnings of the field.

ADED 412 Concepts and Values in Adult Education (3 credits)

This seminar is designed to encourage adult educators to reflect upon and question what one is engaged in and why. A selection of conceptual and philosophical issues underlying adult educational practice is critically examined and discussed. Attention is given to the meaning of words, the nature of ideas and values, the implications of assumptions and principles which are deemed specific in the sphere of the education of adults.

ADED 440 Issues in the Practice of Adult Education (3 credits)

The purpose of this seminar is to study and discuss current issues relating to the field and profession of adult education in general, along with more specific and local concerns. Group and individual interests have an important bearing on the design of this course.

ADED 450 Adulthood and the Process of Educational Change (3 credits)

This course examines the factors which promote and inhibit educational change in adults. It provides a basis for understanding and intervening with adults in order to facilitate their taking greater responsibility for managing their own learning and for increasing effectiveness.

ADED 496 Integrative Internship I (3 credits)

Prerequisite: ADED 201; ADED 202 and 15 credits in the programme. This internship is designed to assist individual students in achieving a synthesis of their own experiential learning in light of acquired knowledge, skills, values, and attitudes through the clarification of personal aims and the philosophy of adult education.

Students will normally enrol in this internship near the end of their programme. NOTE: Students who have received credit for ADED 495 may not take this course for credit.

NOTE: Students will normally enrol in ADED 496 near the end of their programme.

ADED 497 Integrative Internship II (3 credits)

Prerequisite: Successful completion of ADED 496. This internship is designed to extend the personal aims and philosophy of adult education arrived at in Integrative Internship I, and engage in a special project in an adult education facility where supervision is provided by the host institution. NOTE: Students who have received credit for ADED 495 may not take this course for credit.

ADED 498 Advanced Topics in Adult Education (3 credits)

ADED 499 Advanced Topics in Adult Education (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.100

ENGLISH

Faculty

Chair TERENCE BYRNES

Professors MALCOLM FOSTER JUDITH S. HERZ DAVID KETTERER

Associate Professors
ROBERT ALLEN
MICHAEL BRIAN
MARY DI MICHELE
MARCIE FRANK
LAURA GROENING
NICOLA NIXON
EYVIND C. RONQUIST
JOHN R. SORFLEET
BINA TOLEDO-FREIWALD

Assistant Professors JASON CAMLOT MARCEL DE COSTE JILL DIDUR ANDRE FURLANI JOHN MILLER KEVIN PASK

Writer-in-Residence Announced yearly in June

Professors Emeriti HENRY BEISSEL HOWARD FINK WYNNE FRANCIS PATRICIA MORLEY

Adjunct Professors LASZLO K. GEFIN EDWARD PECHTER G. DAVID SHEPS

Location

Sir George Williams Campus J.W. McConnell Building, Room: LB 501 (514) 848-2340

Department Objectives

The Department of English offers studies in literature, creative writing, and composition. Literary studies encourage appreciation and critical analysis of texts in their historical, literary, and cultural contexts. The Creative Writing programme allows students to learn the craft involved in the production of original literary work. Composition courses, for students throughout the University, help to develop writing skills from basic to advanced levels.

Admission Requirements

ADMISSION REQUIREMENTS FOR CREATIVE WRITING COURSES AND PROGRAMMES

Genre courses in Creative Writing are conducted as workshops in which enrolment is limited to permit constructive analysis of a student's work. Students wishing to enter any introductory genre course in Creative Writing (225, 226, 227) must apply by submitting a letter of intent along with a portfolio consisting ordinarily of 20 pages of their own work in any genre. Applications will be received as early as January of each year but no later than March 15. Since student demand regularly outpaces our enrolment capacity, early application is advisable.

Creative Writing programmes (Major and Minor) are designed primarily to develop the literary skills of students with a commitment to writing as an art form. Structured workshops guide students from introductory to advanced levels through the practice of their craft under the supervision of experienced writers.

Students wishing to proceed to an advanced (400-level) workshop must achieve a final grade of "B-" or better in an introductory workshop in Creative Writing.

Students are required to complete the appropriate entrance profile for entry into the programme (see §31.002 — Programmes and Admission Requirements — Profiles).

REQUIREMENTS FOR ENGLISH LITERATURE MAJOR

All students entering the English Literature Major must take a special Composition placement test which includes a literary component. Depending on the results of the test, students will be granted exemption from the Composition requirement, or placed according to their levels in, initially, one of ENGL 206, ENGL 207, ENGL 212, or ENGL 213. (Some sections of ENGL 212 and ENGL 213 are specially designated for English Majors.) Credits in ENGL 212 and ENGL 213 count towards the BA but not towards the programme total. The Composition requirement has to be satisfied in the first year of enrolment in the programme. Students should note the required introductory courses in each of the programmes.

Programmes

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Admission to the Honours programme is granted at the end of the student's first year, after departmental review.

BA Honours in English Literature

- Chosen from ENGL 264³, 265³, 266³ Chosen from ENGL 270⁶, 272⁶
- NOTE: The above 12 credits to be taken within the first 18 credits
- 18 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.
 - 1) Early, medieval, and 16th century from ENGL 302³, 304⁶, 310³, 316³, 430⁶, 432⁶, 434³
 - 2) 17th century from ENGL 311³, 318N³, 319³, 320⁶, 435³, 436³, 437³
 - 3) 18th century from ENGL 321³, 322³, 323³, 324⁶, 331³, 438³, 439³, 440³, 441³ 4) 19th century from ENGL 3246, 3256,
 - 330⁶, 331³, 441³, 442³, 443³
- Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.
 - 1) Modern and contemporary from ENGL 336³, 337⁶, 341³, 345³, 346⁶, 349³, 350⁶, 351³, 354³, 355³, 359³, 394³, 445³, 446³, 447³
 - 2) American from ENGL 363³, 364³, 365³, 367³, 368³, 380³, 448³, 449³, 450³ 3) Canadian from ENGL 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³
 - 4) Postcolonial from ENGL 383³, 386³, 387³, 388³, 454³

NOTE: Six of the above 15 credits may be taken from ENGL 2796 through 2896 in the appropriate groups as follows:

- 1) ENGL 2796, 2896
- 2) ENGL 2856
- 3) ENGL 2876
- 4) ENGL 2886
- **ENGL 470**³ 3
- Elective credits from ENGL 224 through 12

NOTE: Honours students must take at least nine credits at the 400 level, including ENGL 470. However, a student, in consultation with the Honours-Majors adviser may substitute another 400-level course for ENGL 470.

BA Specialization in English Literature

- Chosen from ENGL 264³, 265³, 266³
- 12 Chosen from ENGL 270⁶ through 289⁶ (with at least six credits from ENGL 2706, 272⁶)
 - NOTE: The above 18 credits to be taken within the first 24 credits
- Chosen from the following four groups:

- at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.
- 1) Early, medieval, and 16th century from ENGL 302³, 304⁶, 310³, 316³, 430⁶, 432⁶, 434³
- 17th century from ENGL 311³, 318N³ 319³, 320⁶, 435³, 436³, 437 18th century from ENGL 321³, 322³
- 323³, 324⁶, 331³, 438³, 439³, 440³, 441³ 4) 19th century from ENGL 3246, 3256, 330⁶, 331³, 441³, 442³, 443³
- 12 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.
 - 1) Modern and contemporary from ENGL 336³, 337⁶, 341³, 345³, 346⁶, 349³, 350⁶, 351³, 354³, 355³, 359³, 394³, 445³, 446³, 447³
 - 2) American from ENGL 363³, 364³, 365³, 367³, 368³, 380³, 448³, 449³, 450³ 3) Canadian from ENGL 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³ 4) Postcolonial from ENGL 383³, 386³, 387³, 388³, 454³
- Elective credits from ENGL 224 through

42 **BA Major in English Literature**

- Chosen from ENGL 264³, 265³, 266³
- Chosen from ENGL 2706 through 2896 (with at least six credits from ENGL 2706, 272⁶)
 - NOTE: The above 18 credits to be taken within first 24 credits
- Chosen from ENGL 2706 through 2896, 3023 through 4996, with at least six credits at the 300 or 400 level
- Elective credits from ENGL 224³ through 4803, with at least three credits at the 300 or 400 level

60 **BA Honours in English and Creative** Writing

- 6
- Chosen from ENGL 264³, 265³, 266³ Chosen from ENGL 225⁶, 226⁶, 227⁶ Chosen from ENGL 425⁶, 426⁶, 427⁶
- Chosen from ENGL 410⁶, 411⁶, 412⁶, 413⁶
- Chosen from ENGL 224³, 410⁶ through 428⁶, 470³
- Chosen from the following five groups. Students must take at least three credits in three of the groups. A course can count in only one group, even if it is listed in more than one.

- 1) Early, medieval and 16th century from ENGL 302³, 304⁶, 310³, 316³, 430⁶, 432⁶, 434³
- 2) 17th century from ENGL 311³, 318N³, 319³, 320⁶, 435³, 436³, 437³
- 3) 18th century from ENGL 3213, 3223, 323³, 324⁶, 438³, 439³, 440³, 441³
- 4) 19th century from ENGL 324⁶, 325⁶, 330⁶, 331³, 441³, 442³, 443³
- 5) Modern and contemporary from ENGL 336³, 337⁶, 341³, 345³, 346⁶, 349³, 350⁶, 351³, 354³, 355³, 359³, 394³, 445³, 446³, 447³
- American and postcolonial from ENGL 285⁶, 288⁶, 363³, 364³, 365³, 367³ 368³, 380³, 383³, 386³, 387³, 388³, 448³, 449³, 450³, 454³
- Canadian from ENGL 287⁶, 373³, 374³, 376³, 377³, 380³, 451³, 452³, 453³

42 **BA Major in Creative Writing***

- Chosen from ENGL 225⁶, 226⁶, 227⁶ 12
- Chosen from ENGL 4256, 4266, 4276
- Chosen from ENGL 410⁶, 411⁶, 412⁶, 413⁶, 425⁶, 426⁶, 427⁶
- Credits in Canadian Literature
- ENGL elective credits in literature courses

*NOTE: Students wishing to register for the Major in Creative Writing should refer to the admission requirements for Creative Writing courses and programmes.

Minor in Creative Writing

- 12
- Chosen from ENGL 225⁶, 226⁶, 227⁶ Chosen from ENGL 410⁶, 411⁶, 412⁶, *12 413⁶, 425⁶, 426⁶, 427⁶

6 ENGL elective credits

Students wishing to register for the Minor in Creative Writing should refer to the admission requirements for Creative Writing courses and programmes.

*NOTE: At least six credits in this group must be chosen from 425°, 426°, or 427°

Minor in English Literature

ENGL elective credits in literature courses*

*Students are encouraged to consult with the Department in selecting their courses.

BA Joint Specialization in English and History

- Chosen from ENGL 264³, 265³, 266³
- Periods before 1800 (British and European) from ENGL 3026 through 324⁶, 430³ through 441³
- Canadian, American, and postcolonial from ENGL 3633 through 3883, 4483 through 4543
- 19th century and 20th century (British and European) from ENGL 324³ through 359³. 394³, 442³, 443³, 445³ through 447³
- Elective credits from ENGL 224³ through 499^{3}
- 6 HIST 201³, 202³
- Chosen from HIST 203³, 205³, 251³, 253³
- 200-300 level non-Western HIST
- 300-level pre-1800 Canadian, American, British, or European HIST
- 300-level post-1800 Canadian, American, British, or European HIST
- 300-400 level History elective credits

Courses

200-level courses and 300-level courses without prerequisite are open to all students and may be used as English electives unless otherwise indicated.

Written work may be required in English for these courses; please consult with the Department. Not all courses listed here are offered in a given year. The Department will make an effort to offer the 200- and 300-level courses that are required for specific programmes on a regular basis. General electives (230-254) and courses at the 400 level will be offered on a rotating basis. Students should consult the annual Department of English Course Guide to determine which courses are being offered in any given year.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ENGL 206 Fundamentals of Written English (3 credits)

Prerequisite: Placement test. This course provides practice in grammar and usage, sentence structure, punctuation, paraphrasing and summarizing, paragraphing, and essay writing.

NOTE 1: This course does not count for credit within any English programme.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course for credit.

NOTE 3: Students who have received credit for ENGL 205 may not take this course for credit.

ENGL 207 Essentials of Written English (3 credits)

Prerequisite: ENGL 206 or placement test. This course provides practice in English composition and reading analysis for students who are not yet ready for ENGL 212.

NOTE 1: This course does not count for credit within any English programme.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206 for credit.

NOTE 3: Students who have received credit for ENGL 209 may not take this course for credit.

ENGL 208 Introduction to English Composition and Literary Analysis (6 credits)

Prerequisite: ENGL 207 or placement test. This course is intended for students who wish to improve their ability to engage in written analysis of fiction, poetry, drama, and literary essays. NOTE 1: This course does not count for credit within any English programme.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence for credit.

ENGL 212 English Composition — Stage I (3 credits)

Prerequisite: ENGL 207 or placement test. This course is intended to help students produce clear, concise, logically organized essays and reports. Emphasis is placed on purpose, organization, development, sentence structure, and diction.

NOTE 1: A GRADE OF "C-" OR HIGHER IN THIS COURSE MEETS THE UNIVERSITY WRITING TEST REQUIREMENT.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence for credit.

ENGL 213 English Composition — Stage II (3 credits)

Prerequisite: ENGL 212. This course develops further the writing skills acquired in ENGL 212. The main purpose is to familiarize students with the process and techniques necessary for the preparation of research papers and academic reports.

NOTE 1: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence.

NOTE 2: The composition sequence also includes ENGL 396, Advanced Composition.

ENGL 224 The Creative Process (3 credits)

This course introduces students to the creative process involved in writing prose fiction, poetry, and drama, including the search for inspiration, the exploration and nurturing of the "germ" of a pattern or idea, and its development into artistic form. Course material is drawn from texts, letters, worksheets, and biographies of poets, prose writers, and playwrights, and combines lectures and discussions. While the course is not a writing workshop, students are invited to read widely, participate in discussions, and engage in some writing of poetry, fiction, or drama. The course is open to all students.

ENGL 225 Creative Writing: Poetry (6 credits)

This course is a workshop in the writing of poetry, including detailed discussions and written criticism of students' work. It includes

the study of selected poems and poetics. NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 226 Creative Writing: Prose Fiction (6 credits)

This course is a workshop in the writing of fiction, including an exploration of narrative forms and techniques as well as discussion and written criticism of students' work. Students are expected to read widely and to submit their own work for discussion and analysis.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 227 Creative Writing: Drama (6 credits)

This course is a workshop in the writing of plays, including an exploration of dramatic forms and techniques. Students are expected to read widely and to submit their own work for discussion and analysis.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 230 Major Writers in English (6 credits)

This course is an introduction to major writers of British literature in their historical contexts. The survey includes such authors as Chaucer, Shakespeare, Donne, Milton, Swift, Austen, Blake, Wordsworth, Byron, the Brownings, Tennyson, Hardy, Woolf, Joyce, and Eliot. NOTE: This course may not be taken for credit with ENGL 270 or 272. It is reserved for non-Majors.

NOTE: Students who have received credit for ENGL 256, 257, 258, 270 may not take this course for credit.

ENGL 231N Medieval Literature in Translation (3 credits)

This course studies influential texts in the Western tradition written between 400 and 1500, with emphasis on the innovations in the various genres of narrative (epic, saga, romance, tale) and erotic and ethical discourse. Texts by such writers as Marie de France, Chrétien de Troyes, Dante, and Petrarch, may be studied, as well as anonymous works such as Icelandic sagas and *The Song of Roland.* NOTE: Students who have received credit for ENGL 231 or 262 may not take this course for credit.

ENGL 233 Critical Reading (3 credits)

This course is an introduction to the practice of close reading of selections chosen from poetry, prose, and drama with the aim of developing the skills necessary to respond to literature.

NOTE: Students who have received credit for ENGL 271 may not take this course for credit.

ENGL 234 Poetry (3 credits)

Through a detailed examination of the various forms of poetry, this course is designed to familiarize students with the vocabulary and critical and technical concepts of the genre. NOTE: Students who have received credit for ENGL 275 may not take this course for credit.

ENGL 235N Short Fiction (3 credits) Through a detailed examination of the various forms of short fiction and the novella, this course is designed to familiarize students with the vocabulary, critical concepts, and history of

NOTE: Students who have received credit for ENGL 280 may not take this course for credit.

ENGL 240 Drama (6 credits)

This course is an introduction to dramatic literature, principally in the Western tradition, and is designed to familiarize students with major works in this genre. Plays include ancient Greek dramas and works from the European as well as British and North American stages by such writers as Aeschylus, Sophocles, Aristophanes, Shakespeare, Calderòn, Webster, Racine, Molière, Büchner, Chekhov, Ibsen, Beckett, Handke, Stoppard, and Soyinka.

ENGL 241 The Novel (6 credits)

This course is an introduction to major novels of the Western tradition, drawn principally from Britain, Europe, and the Americas. The course includes such authors as Cervantes, Fielding, Lady Murasaki, Austen, Goethe, Stendahl, Flaubert, the Brontës, Eliot, Melville, Dostoevsky, Kafka, Tolstoy, James, Joyce, Mann, Kundera, and Marquez.

ENGL 242 Tragedy and Comedy (6 credits)

This course is an introduction to the nature and varieties of tragic and comic forms and sensibilities in Western literature. The course includes writers from antiquity to the present, such as in the tragic mode, Sophocles, Euripides, Shakespeare, Behn, Racine, Hardy, Ibsen, Lorca, Chopin, and in the comic mode, Aristophanes, Cervantes, Jonson, Molière, Sterne, Gogol, Wilde, Leacock, and Amis.

ENGL 243 Satire (6 credits)

This course is an introduction to the nature, varieties, and functions of satire, including writers from antiquity to the present, such as Juvenal, Horace, Erasmus, Swift, Voltaire, Byron, Butler, Orwell, Waugh, Spark, Richler, Vonnegut, and Atwood.

NOTE: Students who have received credit for ENGL 283 may not take this course for credit.

ENGL 244 Québec/Montréal Writing in English (3 credits)

This course surveys the literature of Québec written in English, with emphasis on Montréal writing. It includes such writers as F.R. Scott,

MacLennan, Klein, Layton, Symons, Gallant, Richler, Cohen, Anderson, Glassco, and Mouré.

ENGL 245 The Bible and Literature (3 credits)

This course introduces students to the literary handling of Biblical materials and the literary uses of Biblical allusion in writings by such authors as Spenser, Milton, Bunyan, Blake, and T.S. Eliot.

NOTE: Students who have received credit for ENGL 385 may not take this course for credit.

ENGL 246N Science Fiction (3 credits)

This introductory course explores the development of science fiction from Mary Shelley to H.G. Wells to the present day. Along with works by such authors as Huxley, Clarke, Dick, Delany, Le Guin, Atwood, or Gibson, translated works by such authors as Verne, Zamyatin, and Lem may be studied.

NOTE: Students who have received credit for ENGL 246 or 395 may not take this course for credit.

ENGL 247N Myth and Ideas in Literature (3 credits)

This course introduces students to the sources, literary developments, and continuing function of myths that inform and shape our ideas and literature.

NOTE: Students who have received credit for ENGL 247 or 260 may not take this course for credit.

ENGL 249 Children's Literature (6 credits)

As an introductory survey of children's literature, this course includes works written primarily for adults but traditionally also read by children, works specifically written for children, as well as fairy tales and other versions of folklore and myth written or adapted for children.

NOTE: Students who have received credit for

NOTE: Students who have received credit for ENGL 237 may not take this course for credit.

ENGL 250 Forms of Popular Writing (3 credits)

The topic of this course varies from year to year. It investigates such forms as spy novel, detective fiction, mystery, romance, travel writing, horror, erotica in the context of the conventions, history, and popular appeal of the genre under discussion.

ENGL 264 Introduction to Literary Study: Genre (3 credits)

This course examines the significance of generic classification for the acts of reading and interpretation. Relying on this principle of selection, the course identifies the formal characteristics of and historical changes in the various genres, such as the story, essay, lyric, and play, each of which utilizes distinctive resources and audience expectations.

NOTE: Students who have received credit for this topic under an ENGL 298 number may not take this course for credit.

ENGL 265 Introduction to Literary Study: Critical Approaches (3 credits)

This course examines a variety of critical approaches to interpretation. It explores literary texts in the context of the differing interpretations they provoke and the critical and theoretical assumptions that inform these interpretations.

ENGL 266 Introduction to Literary Study: Historical and Cultural Approaches (3 credits)

This course examines selected literary texts through attention to their social, historical, and literary contexts. It looks at such issues as the ways in which literary texts constitute and are constituted by historical period, social class, gender, and ideology, as well as at the concept of "period" as a marker of literary history. NOTE: Students who have received credit for this topic under an ENGL 298 number may not take this course for credit.

ENGL 270 Introduction to English Literature I (6 credits)

Old English to the mid-seventeenth century: starting with selected Old English texts in translation, the course then examines the literary production of the medieval period and the fifteenth to seventeenth centuries in Britain. Works are studied in their social and historical contexts and, where possible, in relation to the other arts. The course may discuss *Beowulf*, Chaucer, Julian of Norwich, medieval drama, Malory, Skelton, Wyatt, Spenser, the Sidneys, Shakespeare, Webster, Donne, Lanyer, Burton, Browne, and Milton.

NOTE: Students who have received credit for ENGL 230, 256, 257, 258 may not take this course for credit.

ENGL 272 Introduction to English Literature II (6 credits)

The mid-seventeenth century to 1900: this course surveys literature written in Britain from the period following the Civil War and Commonwealth to the end of the Victorian era, periods traditionally labelled Neo-Classic, Romantic, and Victorian. The course considers such issues and forms as epic, mock-epic, satire, the development of the novel, the comedy of manners, the rise of the professional writer, the romantic lyric, the increasing activity of women writers, the origins of modernism, and the interrelations among the periods. NOTE: Students who have received credit for ENGL 230, 256, 257, 258 may not take this course for credit.

ENGL 279 Modern British and American Literature (6 credits)

This course provides an introduction to the modern period, when writing in the United States and Britain formed an interconnected body of work, making it difficult to determine the national and cultural affiliation of, for example, Eliot and Auden. Readings are drawn from some of the major texts of British and American poetry, drama, and fiction of the first half of the

century, including such writers as James, Wharton, Barnes, Woolf, Hemingway, Yeats, Joyce, and Lawrence.

NOTE: Students who have received credit for ENGL 306 may not take this course for credit.

ENGL 285 Introduction to American Literature (6 credits)

This course provides an introduction to American literature from the colonial period into the twentieth century. Readings are drawn from such writers as Bradstreet, Emerson, Thoreau, Poe, Hawthorne, Melville, Whitman, Dickinson, Twain, James, Douglass, Chopin, Fitzgerald, and Faulkner.

NOTE: Students who have received credit for ENGL 300, 301, 303 may not take this course for credit.

ENGL 287 Introduction to Canadian Literature (6 credits)

This course examines the development of Canadian literature from its beginnings to the present day through a series of representative works of prose and poetry, written in or translated into English.

NOTE: Students who have received credit for ENGL 290 may not take this course for credit.

ENGL 288 Introduction to Postcolonial Literature (6 credits)

This course provides an introduction to literature in English from formerly colonized regions such as Africa, South Asia, North America, the South Pacific, and Caribbean. Through an examination of representative texts, the course addresses such issues as the process by which English spread throughout the world as a result of British imperialism, and the development of writing in English both before and during the period of decolonization.

ENGL 289 Reading Women Writing: an Historical Introduction

(6 credits)

This course offers an historical and theoretical perspective on writings by women from different periods, cultural contexts, and expressive forms. A close reading of selected novels, short stories, plays, and of polemical, poetic, and autobiographical works raises such issues as class, race, and gender; sexuality and creativity; national, collective, and individual identity; literary and political strategies of resistance; the use, transformation and subversion of literary forms; the popular and critical reception of individual works. NOTE: Students who have received credit for ENGL 248 may not take this course for credit.

ENGL 298 Selected Topics in English (3 credits)

ENGL 299 Selected Topics in English (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ENGL 302 History of the English Language (3 credits)

This course examines changes in the English language from the Anglo-Saxon era to the present, considering such matters as pronunciation, inflections, syntax, vocabulary, and social distribution.

NOTE: Students who have received credit for ENGL 393 may not take this course for credit.

ENGL 304 Chaucer (6 credits)

This course studies major texts of Geoffrey Chaucer with emphasis on *Troilus and Criseyde* and *Canterbury Tales* in terms of the social, literary, and historical issues opened by these texts.

NOTE: Students who have received credit for ENGL 312 may not take this course for credit.

ENGL 310 Writing of Tudor England: Prose and Poetry (3 credits)

This course investigates developments in non-dramatic literature from the late fifteenth century to the 1590s, through an examination of representative poems and prose works in their historical and cultural contexts. The course includes such writers as Skelton, Wyatt, Nashe, Spenser, Sidney, and Shakespeare.

NOTE: Students who have received credit for ENGL 317 may not take this course for credit.

ENGL 311N Writing of the Late Sixteenth Century to the Mid-Seventeenth Century: Prose and Poetry (3 credits)

This course examines the development of prose and lyric poetry from the 1590s through the Civil War and Commonwealth periods. It considers such issues as genre, form, the representation of subjectivity and gender, the function of patronage, and the shift to a print culture. The course includes such writers as Mary Sidney, Jonson, Lanyer, Donne, Browne, Walton, Herbert, Wroth, and Marvell.

NOTE: Students who have received credit for ENGL 327 may not take this course for credit.

ENGL 316 Spenser (3 credits)

This course examines Spenser's works, especially *The Faerie Queene*, in relation to such topics as genre, literary tradition, and historical and cultural contexts.

ENGL 318N English Renaissance Drama (3 credits)

This course studies plays written in the period from the start of the English commercial theatre in 1576 until its closing in 1642, in terms of the development of dramatic forms, court and popular culture, and social history. The course includes such writers as Kyd, Marlowe, Middleton, Jonson, Cary, Webster, and Ford.

NOTE: Students who have received credit for ENGL 318 may not take this course for credit.

ENGL 319 *Milton* (3 credits)

This course examines *Paradise Lost* and selections from Milton's early poetry, especially *Lycidas*, in the contexts of seventeenth-century writing, politics, and religion.

NOTE: Students who have received credit for ENGL 328 may not take this course for credit.

ENGL 320 Shakespeare (6 credits)

This course examines a range of Shakespearean texts in relation to such matters as dramatic and theatrical conventions, social history, poetic language, high and popular culture, critical history, and influence.

ENGL 321 Writing of the Late Seventeenth and Early Eighteenth Century: Prose and Poetry (3 credits)

This course studies the non-dramatic writing of the period from the Restoration through the first four decades of the eighteenth century, with attention to such topics as the expansion of the reading public, the shift from a court-centred scene of literary production, the founding of the Royal Society, and formal topics, such as developments in satire, essay, and novel. Authors may include Cavendish, Dryden, Manley, Addison, Steele, Swift, Pope, Defoe, and Fielding. NOTE: Students who have received credit for ENGL 333 may not take this course for credit.

ENGL 322 Restoration and Eighteenth-Century Drama (3 credits)

This course examines the changing role of the theatre in English culture from the Restoration to the end of the eighteenth century. It includes examples of comedies of Manners, Heroic Tragedies, She-tragedies, Sentimental Tragedies and Sentimental comedies by such writers as Etherege, Congreve, Behn, Trotter, Cibber, Sheridan, and Goldsmith.

NOTE: Students who have received credit for ENGL 335 may not take this course for credit.

ENGL 323 Literature of the Mid-Eighteenth Century (3 credits)

This course examines the writing of the period from the 1740s to the 1780s by such authors as Sterne, Gay, Richardson, Lady Mary Wortley Montagu, Johnson, More, Gray, Collins, Gibbon, and Burke. It explores such concepts and modes as the sentimental, the epistolary, the sublime, and the writing of history and biography. NOTE: Students who have received credit for ENGL 334 may not take this course for credit.

ENGL 324 The Eighteenth- and Nineteenth-Century Novel (6 credits)

This course surveys developments in the British novel from its origins in documentary realism, satire, and romance, including the gothic, to the emergence of the novel as a dominant literary genre. The course includes works by such writers as Defoe, Fielding, Sterne, Radcliffe, Burney, Edgeworth, Austen, Dickens, the Brontës, Eliot, and Hardy.

ENGL 325 Literature of the Romantic Period (6 credits)

This course examines the prose and poetry of the Romantic period (ca. 1790 to 1830s) in relation to such topics as the French Revolution, the Napoleonic wars, domestic politics; literary conventions; the idea of the poet. Among the poets to be considered are Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. Some attention may be given to such writers as Dorothy Wordsworth, De Quincey, Hazlitt, the Lambs, Austen, Scott, Mary Shelley, and Peacock.

NOTE: Students who have received credit for ENGL 338 may not take this course for credit.

ENGL 330 Literature of the Victorian Period (6 credits)

This course studies the poetry, fiction and other prose writings of such writers as Carlyle, Tennyson, the Brownings, the Brontës, Dickens, George Eliot, Newman, Rushkin, and Arnold. These works are examined in relation to such issues as class divisions, gender roles, the erosion of the authority of institutional religion, the increasing prestige of scientific explanation, the growth of British imperial power.

NOTE: Students who have received credit for ENGL 342 may not take this course for credit.

ENGL 331 Eighteenth- and Nineteenth-Century Writing by Women (3 credits)

This course examines the poetry, prose, and drama of such writers as Astell, Manley, Finch, Haywood, Burney, Radcliffe, Edgeworth, Austen, Wollstonecraft, Shelley, the Brontës, and Eliot in such contexts as the gendering of authorship, the making of literary history, and the uses and transformations of literary conventions.

NOTE: Students who have received credit for ENGL 381 may not take this course for credit.

ENGL 336 Late Victorian and Edwardian Writing (3 credits)

This course investigates such matters as late Victorian art and aesthetic theory, the rise of modernism, literary experimentation, and the interrogation of traditional values. Works are selected from such writers as Butler, Pater, Wilde, James, the Rossettis, Swinburne, Morris, Meredith, Schreiner, Hardy, Conrad, and Forster. NOTE: Students who have received credit for ENGL 352, 353 may not take this course for credit.

ENGL 337 Twentieth-Century British Literature (6 credits)

This course examines modern and contemporary prose, poetry, and drama, and the formal, cultural, social, and political changes and upheavals of a century characterized as "the age of extremes". Works are selected from such writers as Joyce, Yeats, Mansfield, Woolf, Lawrence, Eliot, Auden, Bowen, Lessing, Hill,

Hughes, Stoppard, Carter, Byatt, and Rushdie. NOTE: Students who have received credit for ENGL 356 may not take this course for credit.

ENGL 341 Modern Fiction (3 credits)

This course examines a developing international literary culture from the early twentieth century to the post-war period. Works are selected from such writers as Mann, Kafka, Proust, Stein, Camus, Borges, Nabokov, and Pynchon. NOTE: Students who have received credit for ENGL 307, 308 may not take this course for credit.

ENGL 345 Modern Drama (3 credits)

This course surveys the main currents of twentieth-century drama in a study of such writers as Ibsen, Chekhov, Strindberg, Lorca, Lady Gregory, Ionesco, Barnes, Beckett, Albee, Pinter, Orton, Stoppard, and Handke.

NOTE: Students who have received credit for ENGL 392 may not take this course for credit.

ENGL 346 Modern European Literature (6 credits)

This course surveys late nineteenth- and twentieth-century plays, poems, and novels in translation, chosen from such writers as Dostoevsky, Tolstoy, Ibsen, Chekhov, Gide, Sartre, Colette, Akhmatova, Svevo, Mann, Musil, Böll, and Calvino.

NOTE: Students who have received credit for ENGL 305 may not take this course for credit.

ENGL 349 Modern Poetry in English (3 credits)

This course studies the theory and practice of poets writing in English during the twentieth century. Examples are chosen from such writers as Yeats, Pound, Eliot, Crane, Stein, Auden, Stevens, Moore, Bishop, and Merrill, as well as from some more recent poets.

NOTE: Students who have received credit for ENGL 390 may not take this course for credit.

ENGL 350 Contemporary Literature (6 credits)

This course examines the relation between the concepts of the contemporary and the postmodern, through an examination of such writers as Amis, Calvino, Pynchon, Rushdie, Desai, Auster, Kureishi, Winterson, Carter, DeLillo, Dove, Heaney, Wilson, Kushner, Durang, and Walcott.

NOTE: Students who have received credit for ENGL 459 may not take this course for credit.

ENGL 351 Twentieth-Century Writing by Women (3 credits)

Through fiction, personal writings, poetry, and drama, this course examines gender and its discontents in turn-of-the-century and mid-century writing, in writing of the modernist period, and in writing of the politically oriented "second wave" of feminism of the 1960s and 1970s. Its concerns include the developing representation of race,

class, and sexual orientation. Works are selected from such writers as Woolf, Hurston, Nin, Plath, Rich, Rule, Walker, Morrison, Cixous, Pollock, Gordimer, and El Saadawi.

NOTE: Students who have received credit for ENGL 382 may not take this course for credit.

ENGL 354 Contemporary Writing by Women (3 credits)

This course deals with fiction, personal writings, poetry, and drama from the late 1970s to the present. Its concerns may include the challenges and possibilities of postmodernism; experiments in writing the life, writing the body, writing between genres, between cultures; collaborative writing; the uses and transformations of traditional and popular forms of writing. Works are selected from such writers as Morrison, Desai, Munro, Marlatt, Scott, Maracle, Aidoo, Winterson, Gallant, Anzaldua, and Rendell.

NOTE: Students who have received credit for ENGL 382 may not take this course for credit.

ENGL 355 Joyce (3 credits)

This course will examine Joyce's *Ulysses* in its formal, historical, and cultural contexts. Other writings of Joyce may receive some attention.

ENGL 359 Studies in Irish Literature (3 credits)

The subject matter of this course varies. Topics may include the Irish Literary Revival, contemporary Irish literature, the Irish short story tradition.

ENGL 362 Studies in Science Fiction (3 credits)

The subject matter of this course varies. It may concentrate on a particular theme or issue, or on an important author or group of authors.

ENGL 363 American Literature from Origins to Late Nineteenth Century (3 credits)

This course covers the various forms of American writing — fiction, biography, autobiography, letters, poems — from colonial times to the late 19th century through the work of such writers as Bradstreet, Taylor, Edwards, Wheatley, Emerson, Thoreau, Melville, Hawthorne, Poe, Twain, Whitman, Dickinson, Douglass, and Stowe. NOTE: Students who have received credit for ENGL 301 may not take this course for credit.

ENGL 364 American Literature from the Late Nineteenth to the Mid-Twentieth Century (3 credits)

This course studies the overlapping and related developments of naturalism, regionalism, realism, and modernism through the work of such writers as Twain, Stephen Crane, Dreiser, Chopin, Wharton, James, Fitzgerald, Hart Crane, O'Neill, Faulkner, Hemingway, Pound, Moore, Ellison, and Williams.

NOTE: Students who have received credit for ENGL 303 may not take this course for credit.

ENGL 365 American Literature from Mid-Century to the Present

This course considers developments in American literature since World War II through the work of such writers as Plath, Bishop, Baldwin, O'Connor, Bellow, Nabokov, Pynchon, Updike, Oates, Morrison, Barthelme, and Walker. NOTE: Students who have received credit for ENGL 309 may not take this course for credit.

ENGL 367 American Poetry (3 credits) This course considers the theory and practice of American poetry from the nineteenth century to the present through the work of such writers as Whitman, Dickinson, Robinson, Frost, H.D., Pound, Cummings, Stevens, Williams, Olson,

Whitman, Dickinson, Robinson, Frost, H.D., Pound, Cummings, Stevens, Williams, Olson, Ginsberg, Snyder, Moore, Rukeyser, Bishop, Merrill, Rich, Ashberry, and Angelou.

ENGL 368 African-American Literature (3 credits)

This course provides a survey of the African-American literary tradition from Frederick Douglass to the present, giving particular attention to slave narratives, the Harlem Renaissance, the Civil Rights Movement, and contemporary writing. The course includes the prose of such writers as Toomer, Larsen, Wright, Hurston, Ellison, Baldwin, Walker, and Reed, and poetry by such writers as Hughes, Brooks, Baraka, and Morrison.

ENGL 373 Nineteenth-Century Canadian Literature (3 credits)

This course studies the literature written in Canada in a variety of genres as the country evolved from colony to nation. It explores such topics as the relations among discourse, nation building, gender, and genre.

ENGL 374 Canadian Fiction to 1950 (3 credits)

This course studies the themes and technical strategies of Canadian fiction from the 1890s to the mid-twentieth century by such authors as Roberts, Montgomery, Leacock, Callaghan, Ross, MacLennan, Mitchell, and Smart. NOTE: Students who have received credit for ENGL 370 may not take this course for credit.

ENGL 376 Postwar Canadian Fiction (3 credits)

This course studies Canadian fiction from 1950 through the mid-1960s as it incorporates the lyrical and the documentary, the universal and the regional, the traditional and the experimental. Authors may include Roy, Wilson, Buckler, MacLennan, Watson, Wiseman, Cohen, and Richler.

NOTE: Students who have received credit for ENGL 371 may not take this course for credit.

ENGL 377 Contemporary Canadian Fiction (3 credits)

This course studies the continuity and

development of Canadian fiction from the mid-1960s to the present. Authors may include Laurence, Davies, Carrier, Wiebe, Atwood, Munro, Kogawa, Shields, Gallant, and Ondaatje. NOTE: Students who have received credit for ENGL 372 may not take this course for credit.

ENGL 378 Modern Canadian Poetry (3 credits)

This course examines the changes in Canadian poetry from the beginning of the twentieth century to the mid-1960s by such authors as Pratt, Klein, Scott, Livesay, Birney, Page, Layton, Purdy, and Avison.

NOTE: Students who have received credit for ENGL 375 may not take this course for credit.

ENGL 379N Contemporary Canadian Poetry (3 credits)

This course examines the development of Canadian poetry from the mid-1960s to the present by such authors as Atwood, Ondaatje, Nichol, MacEwan, Kroetsch, Webb, Kogawa, Dewdney, and Brand.

ENGL 380 First Nations/North American Native Literature (3 credits)

This course studies the native literature of Canada and/or the United States, from oral performance traditions, transcriptions and translations into English, and writing in English by such authors as Johnston, Campbell, King, Highway, Momaday, Erdrich, Allen, and Silko.

ENGL 383 African Literature (3 credits)
This course considers how literature in English
by writers from sub-Saharan Africa is embedded
in the history and experience of colonization and
decolonization. The course includes such authors
as Achebe, Soyinka, Saro-Wiwa, Emecheta, Okri,
Armah, Aidoo, Farah, Dangarembga, Coetzee,
and Gordimer. The focus is on the political and
aesthetic issues raised by African writing in
English.

ENGL 386 Caribbean Literature (3 credits)
This course explores how Caribbean literature in
English from nations such as Barbados, Trinidad,
Antigua, Jamaica, Grenada, St. Lucia, and
Guyana is implicated in the history of slavery,
colonialism, and postcolonialism. The work of
such authors as Bennett, Walcott, Brathwaite,
Goodison, James, Selvon, Lamming, Naipaul,
Brodber, Cliff, and Kincaid is examined in
relation to the writers' socio-cultural contexts
and to the political and aesthetic issues raised
by their texts.

ENGL 387 South Asian Literature (3 credits)

This course studies literature from South Asia written in English by authors from India, Pakistan, Bangladesh, and Sri Lanka, such as Rushdie, Anand, Das, Narayan, Ghosh, Desai, Chaudhuri, Markandaya, Sahgal, Salvaduri, Sidhwa, Rao, and Mistry. The focus is on the

significance of precolonial, colonial, and postcolonial socio-cultural concerns as expressed in a variety of literary genres. Attention is given to English as a tool of colonization as well as a means for critiquing cultural hegemony.

ENGL 388N Literature from Australia and New Zealand (3 credits)

This course examines literature in English from Australia and New Zealand by such writers as White, Malouf, Jolley, Carey, Stead, Mudrooroo, Stow, Johnson, Frame, Hulma, Wedde, and Kenneally. Central to the course is a discussion of the impact of colonialism, and the ongoing relationship between settler and aboriginal communities as it inflects a variety of literary genres. Literature from the Pacific islands may also be considered.

ENGL 391 History of Criticism and Literary Theory (6 credits)

This course surveys major theories of criticism in their historical contexts from the Classical period to the mid-twentieth century. Texts are chosen from such representative writers as Aristotle, Sidney, Dryden, Johnson, Lessing, Coleridge, Arnold, Richards, Eliot, Leavis, Empson, Bakhtin, Burke, and Frye.

ENGL 394N Contemporary Critical Theory (3 credits)

This course introduces students to various interpretive strategies in contemporary critical theory, through a study of such topics as structuralism, narratology, debates about genealogy, deconstruction, psychoanalytic theory, gender and performativity. Readings may include texts by Nietzsche, Saussure, Barthes, Foucault, Derrida, Eco, Austin, Cixous, and Sedqwick.

NOTE: Students who have received credit for ENGL 389 may not take this course for credit.

ENGL 396 Advanced Composition (6 credits)

Prerequisite: ENGL 212 and 213 or placement test. This course is intended for students already in control of the essentials of composition who wish to develop their ability to write effectively for business and professional purposes.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or any 200-level composition course (ENGL 206 to 213) for credit.

ENGL 398 Selected Topics in English (3 credits)

ENGL 399 Selected Topics in English (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ENGL 410 Non-Fiction Writing (6 credits)
Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the writing of creative non-fiction (journal, personal essay, travel, biography and autobiography) including the reading of selected texts and discussion and criticism of students' work.

ENGL 411 Script Writing for Radio, Screen, and Television (6 credits)

Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the composition and development of creative scripts for radio, screen, and television. In any one year, the course may concentrate on one or two of these areas.

ENGL 412 Writing of Children's Literature (6 credits)

Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the writing of prose, poetry, and drama for children, including an exploration of the literary techniques appropriate to the sensibilities of children.

ENGL 413 Publishing and Editing (6 credits)

Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course explores such topics as the process of founding and operating small presses or magazines, producing anthologies, and editing individual manuscripts and books.

ENGL 425 Advanced Creative Writing: Poetry (6 credits)

Prerequisite: ENGL 225 or permission of the Department. Through intensive analysis and discussion of students' work, experimentation with a variety of forms, and selected reading, this workshop helps students extend their grasp of poetics and their competence in the writing of poetry.

ENGL 426 Advanced Creative Writing: Prose Fiction (6 credits)

Prerequisite: ENGL 226 or permission of the Department. Through intensive analysis and discussion of submitted work and directed reading in modern fiction, this workshop extends the development of students' narrative skills and their understanding of fictional forms.

ENGL 427 Advanced Creative Writing: Drama (6 credits)

Prerequisite: ENGL 227 or permission of the Department. Through reading of contemporary playwrights and intensive discussion and analysis of submitted work, this workshop helps students refine their skills in the process of completing a full-length play.

ENGL 428 Advanced Studies in Creative Writing (6 credits)

Prerequisite: ENGL 225 or 226 or 227, and one

400-level creative writing workshop, or permission of the Department. This course is an advanced workshop whose subject and format are announced in the English Department Course Guide. The course is intended for those who have already completed several workshops. Submission of a brief portfolio may be required for admission.

ENGL 430 Old English (6 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the language, literature, and culture of the Anglo-Saxon era, including such texts as elegaic lyrics and sections of *Beowulf*.

ENGL 432 Middle English (6 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the variety of texts in English dialects from 1200 to 1500, including such works as *Sir Gawain and the Green Knight* and other romances, *Piers Plowman, Pearl*, the *Showings* of Julian of Norwich, other religious and social discourse, lyrics, and drama.

ENGL 434 Advanced Studies in Early English Literature (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 435 Women Writers of the Early Modern Period (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the emergence into print of women writers from the late sixteenth to the late seventeenth centuries, by exploring such issues as the construction of literary history, histories of gender and sexuality, the relations between gender and genre. Works are chosen from such writers as Sidney, Sowernam, Wroth, Cary, Lanyer, Philips, Cavendish, Behn, Killigrew, Manley, and Trotter.

ENGL 436 Literature of the Civil War and Commonwealth Period

(3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the prose and poetry of the 1630s through the 1650s. It explores the ways in which the Civil War was represented by such writers as Herrick, Suckling, Cowley, Bradstreet, Milton and Marvell. Political tracts, journalism, and private papers and diaries may also form part of the material of the course.

ENGL 437 Advanced Studies in Renaissance and Early Modern Writing (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 438 History, Politics, and Literature in the Eighteenth Century

(3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the relations among the categories of history, politics, and literature, and their development as distinct discourses over the course of the century, through a study of such topics as the status of religion, the rise of science, the expansion of empire, the development of aesthetic discourse, and the construction of the category of the neoclassical.

ENGL 439 The Rise of Criticism and Literary History (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course traces the joint development of the discourses of literary criticism and literary history from 1660 to the legislation assigning copyright to authors in the late eighteenth century. Examples are drawn from such writers as Dryden, Dennis, Addison, Shaftesbury, Hume, and Johnson.

ENGL 440 Advanced Studies in Late Seventeenth- and Eighteenth-**Century Writing** (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 441 Forms of Eighteenth- and **Nineteenth-Century Fiction**

(3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course may focus on a single writer, a type of fiction such as the gothic or the epistolary, or a particular issue in the development of the novel, such as realism or the emergence of women's fiction.

ENGL 442 Comparative Nineteenth-Century Literature (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies literary developments in the United Kingdom, the United States, and Canada, including such issues as Romanticism, the development of national literatures, conceptions of place and landscape, and responses to cultural change.

ENGL 443 Advanced Studies in Nineteenth-Century Literature

(3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

Studies in Rhetoric (3 credits) **ENGL 444** Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the methods and functions of the art of persuasion through examination of its formulations from the Greco-Roman period to

the present, covering such topics as techniques of finding, presenting, and evaluating public positions; devices and effects of style; questions of social thought. Examples are drawn from such classical writers as Plato, Aristotle, and Cicero, through to recent work in contextual and cultural studies by such writers as Kenneth Burke and Catherine Belsey.

NOTE: Students who have received credit for ENGL 384 may not take this course for credit.

ENGL 445 Gender and Sexuality: Contemporary Literature and **Theory** (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the development of the terms "gender" and "sexuality" as categories of historical analysis and literary interpretation, by reading feminist and queer theories of gender and sexuality, such as those of Rubin, Butler, Sedgwick, and Bredbeck, alongside such literary texts as those by Stein, Cooper, Tremblay, and Winterson.

ENGL 446 Advanced Studies in Twentieth-Century Writing

(3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 447 Advanced Studies in Literary Theory (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 448 The American Renaissance (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines both the twentieth-century critics who established and developed the concept of the American Renaissance, and the group of antebellum authors who were chosen as its exemplars, including Emerson, Melville, and Whitman. It also interrogates contemporary critical revisions of that canon, broaching the larger issue of canon formation.

ENGL 449 The American Postmodern (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course focuses on postmodern American writers in the context of the critical debates about what constitutes the postmodern: formally, generically, and politically. It considers such writers as Antin, Ashbery, Waldman, Pynchon, Barthelme, Barth, Acker, Ford, and Morrison.

ENGL 450 Advanced Studies in American Literature (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. A seminar on a selected topic, text, or author. Specific content varies from year to year.

ENGL 451 History and Ideology in Canadian Literature (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the treatment in Canadian literature of such historical and political events, issues, and ideologies as the Conquest, the railroad, the threat of American domination, immigration, and the Canadian west.

ENGL 452 Recent Experiments in Canadian Writing (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies contemporary writing that breaks with or interrogates traditional literary genres and forms. Examples are drawn from such authors as Kroetsch, Marlatt, Ondaatje, Highway, Dewdney, Mouré, and Nichol.

NOTE: Students who have received credit for ENGL 293 may not take this course for credit.

ENGL 453 Advanced Studies in Canadian Writing (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 454 Advanced Studies in Postcolonial Writing (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 470 *Honours Seminar* (3 credits) Prerequisite: Enrolment in Honours English and 30 credits in English. The topic of this course

varies from year to year. The course provides the opportunity for final-year Honours students to apply their experience of literature, literary theory, and criticism on a more advanced level. NOTE: In consultation with the Honours/Majors adviser, Honours students may substitute another course at the 400 level for ENGL 470.

ENGL 474 *Honours Essay* (3 credits) Prerequisite: Enrolment in Honours English and 30 credits in English. With the permission of the Department, an Honours student may arrange a tutorial programme with a faculty member, culminating in the writing of a long paper.

ENGL 480 *Independent Studies* (3 credits) Prerequisite: Enrolment in an English programme and nine credits at the 300 level. With the permission of the Department, a student may arrange a tutorial programme with a faculty member.

ENGL 490 Joint Tutorial in History and English (6 credits)

Prerequisite: Enrolment in an English programme or nine credits in English Literature. A tutorial for students in an English and History Joint Specialization programme.

ENGL 498 Advanced Topics in English (3 credits)

ENGL 499 Advanced Topics in English (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.110

ÉTUDES FRANÇAISES

Faculty

Directrice LUCIE LEQUIN, Professeure agrégée

Professeure titulaire et professeurs titulaires JEAN-MARC GOUANVIC GASTON LAURION SHERRY SIMON MAÏR VERTHUY

Professeures et professeurs agrégés PAUL BANDIA GILLES CHARPENTIER CLAIRE LE BRUN CATHERINE MAVRIKAKIS PIERRE PARC MARIE-FRANCE WAGNER

Professeure adjointe et professeurs adjoints AIMÉ AVOLONTO LOUISE BRUNETTE BENOIT LÉGER

Professeures et professeurs associés MARTHE J. CATRY-VERRON PIERRE L'HÉRAULT MARIE-FRANÇOISE LIGIER PASCAL-NORMAND TRUCHON

Localisation

Campus Sir George Williams J.W. McConnell, Salle: LB 631-10 (514) 848-7500/7509

Objectifs du département

L'appellation Études françaises reflète le concept pluridisciplinaire sur lequel se fondent les deux volets de notre mission universitaire : l'enseignement et la recherche. La recherche pure et appliquée se pratique dans les domaines les plus variés de la discipline en étroite liaison avec l'enseignement. De plus, nous participons à la vie intellectuelle et professionnelle de la collectivité, à l'échelle nationale et internationale.

Le Département d'études françaises a une double vocation. Il offre d'une part de solides programmes de langue, littérature, traduction et didactique aux étudiantes et étudiants qui viennent y chercher une formation spécialisée. Il joue d'autre part un rôle capital au sein de l'Université en offrant un vaste éventail de cours de langue, linguistique, littérature et civilisation aux étudiantes et étudiants qui souhaitent compléter la formation qu'elles ou ils reçoivent dans d'autres départements.

Programmes

Il appartient à chaque étudiante et étudiant de remplir toutes les conditions requises dans son programme. L'exposant 3 ou 6 indique le nombre de crédits.

N.B.: Chaque candidate et candidat aux programmes de traduction devrait inclure à son dossier une lettre d'intention rédigée dans sa langue principale.

N.B. : Avant de s'inscrire, les étudiantes et étudiants devront faire approuver leur programme par un membre désigné du département.

60 BA Spécialisation en études françaises

N.B.: Les principaux critères de classement sont la langue d'enseignement des études secondaires, les notes obtenues et les résultats du test d'auto-évaluation du département. Pour obtenir leur diplôme, les étudiantes et étudiants doivent suivre tous les cours du programme dans la voie (A ou B) où ils sont inscrits.

A. Pour les étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français:

- 8 crédits choisis parmi les suivants : FRAN 301⁶, 302³, 303³, 306³, 334³, 400³, 401³, 406³, 407³
- 15 crédits FLIT 300³, 302³, 303³, 305³, 308³
- 27 crédits choisis parmi les autres cours de littérature du département de niveau 300 et 400

- B. Pour les étudiants et étudiantes ayant effectué leurs études secondaires en français :
 - 12 crédits choisis parmi les suivants : FRAN 330³, 331³, 333³, 400³, 401³, 4026, 403³, 406³, 407³, 466³, 468³, 469³, 470³, 471³
 - 15 crédits FLIT 300³, 302³, 303³, 305³, 308³
 - 33 crédits choisis parmi les autres cours de littérature du département de niveau 300 et 400.

45 BA Majeure en études françaises Ontion : Langue ou littératures de

Option : Langue ou littératures de langue française

N.B.: Les principaux critères de classement sont la langue d'enseignement des études secondaires, les notes obtenues et les résultats du test d'auto-évaluation du département. Pour obtenir leur diplôme, les étudiantes et étudiants doivent suivre tous les cours du programme dans la voie (A ou B) où ils sont inscrits. A. Pour les étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français:

Tronc commun

- 18 crédits à choisir parmi les cours FRAN 213⁶ (ou 214³ et 215³ ou 216³ et 217³), 301⁶, 302³, 303³, 305³, 306³, 334³, 400³, 401³, 406³, 407³
- 6 crédits à choisir parmi les cours FLIT 220³, 230³, 240³, 250³, 298³ Volet langue
- 21 crédits choisis parmi les cours FRAN 318³, 319³, 330³, 331³, 332³, 333³, 334³, 400³, 401³, 4026°, 403³, 406³, 407³, 408³, 409³, 412³, 414³, 415³, 418³, 419³, 466³, 468³, 469³, 470³, 471³

Volet littérature

- 21 crédits FLIT choisis parmi les autres cours de littérature du département
- B. Pour les étudiantes et étudiants ayant effectué leurs études secondaires en français : *Tronc commun*
 - 15 crédits à choisir parmi les cours FRAN 306³, 334³, 400³, 401³, 4026, 406³, 407³
 - 9 crédits à choisir parmi les cours FLIT 300³, 302³, 308³ ou 303³, 305³, 308³ Volet langue
 - 21 crédits choisis parmi les cours FRAN 330³, 331³, 332³, 333³, 334³, 400³, 401³, 402⁶, 403³, 406³, 407³, 408³, 409³, 412³, 414³, 415³, 418³, 419³, 466³, 468³, 469³, 470³, 471³ ou parmi 6 crédits FLIT OU

Volet littérature

21 crédits FLIT choisis parmi les autres cours de littérature du département de niveau 300 et 400

48 BA Majeure en études françaises

Option: Traduction 1^{re} étape

- 6 crédits ENGL 212³ et 213³
- 6 crédits à choisir parmi les cours FRAN 301⁶, 302³, 303³, 306³, 400³, 401³ 2º étape
- 6 crédits à choisir parmi les cours FLIT 300³ et 302³, ou 303³ et 305³
- 6 crédits à choisir parmi les cours FRAN 400³, 401³, 402⁶, 403³, 406³, 407³
- crédits FTRA 200³, et 201³ ou 202³ 3^e étape
- 9 crédits à choisir parmi les cours FTRA 301³ ou 304³, 310³, 311³, 403³ ou 404³, 405³ ou 406³, 408³
- 3 crédits à choisir parmi les cours FTRA 412³ et 414³
- 6 crédits en littérature d'expression anglaise

45 BA Majeure en études françaises

Option : Langue et didactique

N.B.: Cette majeure est destinée à celles et

ceux qui possèdent déjà une bonne maîtrise du français et qui souhaitent renforcer leurs connaissances pour pouvoir accéder à des programmes de premier ou de deuxième cycle exigeant une très bonne compétence linguistique, au plan théorique comme au plan pratique, notamment les programmes spécialisés d'enseignement du français. La majeure débute au niveau 400. Les étudiantes et étudiants qui n'ont pas atteint le niveau nécessaire pourront s'y préparer en suivant, hors majeure, un maximum de quatre cours au niveau 300, choisis parmi FRAN 301, 302, 303, 306, 334.

1^{re} et 2^e étapes (30 cr.)

- 12 crédits à choisir parmi les cours FRAN 400³, 401³, 402⁶, 403³, 406³, 407³, 408³
- 12 crédits FLIT au choix en littératures de langue française
- 6 crédits à choisir parmi les cours FRAN 330³, 331³, 332³, 333³, 334³ 2° et 3° étapes (15 cr.)
- 6 crédits à choisir parmi les cours FRAN 466³, 468³, 469³, 470³, 471³
- 9 crédits à choisir parmi les cours FRAN 481³, 482³, 485³, 486³

24 Mineure en langue française

- 24 crédits de langue, choisis dans un ordre accepté par le département, parmi les cours suivants :
 - Un maximum de 18 crédits à choisir parmi les cours FRAN 213⁶, 214³, 215³, 216³, 217³, 218³, 301⁶, 302³, 303³, 305³, 306³, 307³, 318³, 319³, 334³; FLIT 230³, 240³
 - Un minimum de six crédits à choisir parmi les cours FRAN 330³, 331³, 332³, 400³, 401³, 406³, 407³, 408³, 409³, 412³, 414³, 415³, 418³, 419³, 466³, 470³, 471³

24 Mineure en littératures de langue française

24 crédits en littératures de langue française choisis en consultation avec le département

30 Certificat en langue française

Ce programme est accessible soit aux vrais débutants soit à des personnes qui ont déjà une certaine connaissance du français. Dans les deux cas, il permettra d'accéder à un niveau relativement avancé de communication et d'expression en français.

- 30 crédits FRAN, choisis à un niveau et dans un ordre acceptés par le département,
 - 18 crédits FRAN 211 6 , 212 6 , 213 6 (ou 214 3 et 215 3), 216 3 , 217 3 , 301 6 (ou 302 3 et 303 3), 305 3 , 306 3 , 307 3 , 334 3
 - 12 crédits FRAN 301⁶ (ou 302³ et 303³), 306³, 334³, 400³, 401³, 406³, 407³

N.B.: Ce certificat exige normalement plus d'une année de scolarité.

Programme de traduction (formule standard et coopérative)

63 BA Spécialisation en traduction

- N.B.: 1. Le BA Spécialisation en traduction (formule standard et formule coopérative) est un programme contingenté. Comme il demande une excellente connaissance du français et de l'anglais, les étudiantes et étudiants admis devront subir des tests de placement dans les deux langues. Les cours FTRA sont réservés en priorité aux étudiantes et étudiants inscrits dans les programmes de traduction.
 - 2. Le programme de BA Spécialisation en traduction se présente sous deux formules : la formule standard et la formule coopérative. Les conditions d'admission au BA spécialisé en traduction de formule coopérative comprennent, outre celles du programme spécialisé standard, d'autres filtrages du type lettre d'intention, examen écrit, entrevue. La formule coopérative comprend les mêmes cours, en nombre et en nature, que la formule standard; cependant, la séquence des cours varie et trois stages rémunérés de quatre mois chacun, viennent s'ajouter et alternent avec les sessions d'étude (voir calendrier ci-après). Ces stages se déroulent au sein de services linguistiques et sont consacrés à des tâches en traduction ou dans l'un des domaines connexes : rédaction, terminologie, documentation, etc.

Année	Automne	Hiver	Été
1	Cours I	Cours II	Cours III
2	Stage I	Cours IV	Stage II
3	Cours V	Stage III	Cours VI

Les étudiantes et étudiants du programme coopératif sont encadrés chacune et chacun personnellement et doivent satisfaire aux exigences de la Faculté des arts et des sciences et de l'Institut d'enseignement coopératif pour se maintenir dans le programme coopératif. La liaison entre l'étudiante ou l'étudiant, les employeurs et l'Institut d'enseignement coopératif est du ressort du comité du programme coopératif en traduction du Département d'études françaises.

Pour plus de renseignements sur l'Institut d'enseignement coopératif, voir la §24 de cet

- 3. Le programme comporte deux options : la traduction du français vers l'anglais ou de l'anglais vers le français. Normalement, l'étudiante ou l'étudiant choisira l'une ou l'autre de ces deux options. Dans de rares cas, certaines candidates et certains candidats pourront satisfaire aux exigences des deux options.
- 4. Les étudiantes et étudiants du programme de BA Spécialisation en traduction doivent obtenir une note minimale de C dans tous les cours de traduction. Si la note obtenue est inférieure à C, les étudiantes et étudiants devront reprendre le cours dans l'année qui suit. Une seule reprise est permise. Si cette exigence n'est pas satisfaite ou en cas d'échec, les étudiantes et étudiants seront radiés du programme. En cas de probation ou de radiation, les étudiantes et étudiants recevront un avis écrit de la direction du département.

Option A : français-anglais 1^{re} étape

- 6 crédits à choisir parmi les cours FRAN 400³ et 401³, 4026 ou 4063 et 4073 N.B.: Une étudiante ou un étudiant qui, à l'examen d'admission, n'a pas obtenu une note lui permettant de suivre les cours de niveau 400 peut s'inscrire au(x) cours FRAN 3016 ou 302³ et 303³ ou 306³ et suivre les cours ci-dessous en 26 année au plus tard.
- *6 crédits ENGL 2123 et 2133
- 6 crédits en littératures de langue française
- 6 crédits en littératures de langue anglaise
- 6 crédits FTRA 200³ et 201³ 2^e étape
- 12 crédits FTRA 203³, 301³, 310³ et 311³
- **6 crédits de linguistique choisis en consultation avec la conseillère pédagogique ou le conseiller pédagogique 3° étape
- *3 crédits à choisir parmi les cours FTRA 403³, 405³, et 408³
- 3 crédits à choisir entre les cours FTRA 412³ et 414³

- **6 crédits à choisir entre FTRA 401³ et ENGL 233³ ou 396⁶ ou 444³
- 3 crédits FTRA 4093

Option F : anglais-français 1^{re} étape

- *6 crédits à choisir parmi les cours FRAN 400³ et 401³, 4026, ou 406³ et 407³
- *6 crédits ENGL 212³ et 213³ N.B.: Une étudiante ou un étudiant qui n'est pas admissible au cours ENGL 212³ peut s'inscrire aux cours ESL 209³ et 210³ ou ENGL 206³ et suivre les cours ENGL 212³ et 213³ en 2^e année au plus tard.
- 12 crédits en littératures de langue française
- 6 crédits FTRA 200³ et 202³ 2^e étape
- 15 crédits FTRA 204³, 304³, 310³, 311³ et FRAN 403³
- **6 crédits en linguistique en consultation avec la conseillère pédagogique ou le conseiller pédagogique 3° étape
- *3 crédits à choisir parmi les cours FTRA 404³, 406³, 408³

- 3 crédits FTRA 410³
- 3 crédits à choisir entre les cours FTRA 412³ et 414³

*3 crédits à choisir entre les cours FTRA 402³ et FRAN 415³

*L'étudiante ou l'étudiant tenu aux 6 crédits d'ENGL 212³ et 213³ peut les comptabiliser dans les 24 crédits à réaliser hors département. Dans ce cas, il devra ajouter 6 crédits à son programme de cours effectués au département : 3 crédits à choisir parmi les cours de la ligne FRAN 400³, 401³, 402⁶, 406³, 407³; 3 crédits de la ligne FTRA 403³, 405³, 408³ (Option A) ou FTRA 404³, 406³, 408³ (Option F).

**Les étudiantes et étudiants inscrits au programme coopératif doivent obligatoirement suivre FRAN 330³, 331³, 415³.

Cours

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Les cours du département ayant reçu de nouveaux numéros, les étudiantes et étudiants trouveront une liste d'équivalences à la section 200.1.

Langue

FRAN 211 French Language: Elementary (6 credits)

This course is restricted to students having no previous training in French. It includes a comprehensive introduction to the basic structures and vocabulary of French and should enable students to acquire an ability to speak and understand simple conversational French. Both oral and written aspects of the language are presented, with special emphasis on oral skills. Laboratory sessions are included.

NOTE: Students who have received credit for FRAN 200 or FRAN 201 may not take this course for credit.

FRAN 212 Langue française : niveau de transition (6 crédits)

Préalable: FRAN 211 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit un an de français à l'université ou au niveau collégial, soit deux ans de français à l'école secondaire ou l'équivalent. Ce cours permet aux étudiantes et étudiants d'accéder à un niveau de compréhension et d'expression suffisant pour communiquer en français oralement et par écrit avec une certaine assurance. Par l'utilisation de techniques de conversation dirigée, de travail systématique en classe et au laboratoire, et d'exercices écrits, les étudiantes et étudiants acquerront un répertoire de structures et un vocabulaire plus étendu. Séances de laboratoire.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 202 ou FRAN 203 ne peuvent obtenir de crédits pour ce cours.

FRAN 213 Langue française : niveau intermédiaire I et II (6 crédits)

Préalable: FRAN 212 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit quatre ans de français à l'école secondaire, soit deux ans de français à l'université ou au niveau collégial ou l'équivalent. Par une étude et une pratique intensive des tournures du français courant, l'étudiante ou l'étudiant pourra acquérir l'aisance nécessaire à une communication orale et écrite spontanée. Le cours fournira également quelques aperçus sur le mode de vie des

francophones.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 204 ou FRAN 205 ne peuvent obtenir de crédits pour ce cours.

FRAN 214 Langue française : niveau intermédiaire I (3 crédits)

Préalable: FRAN 212 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit 4 ans de français à l'école secondaire, soit 2 ans de français à l'université ou au niveau collégial ou l'équivalent. Par une étude et une pratique intensive des tournures du français courant, l'étudiante ou l'étudiant pourra acquérir l'aisance nécessaire à une communication orale et écrite spontanée. Le cours fournira également quelques aperçus sur le mode de vie des francophones.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 204 ou FRAN 213 ne peuvent obtenir de crédits pour ce cours.

FRAN 215 Langue française : niveau intermédiaire II (3 crédits)

Préalable : FRAN 214 ou l'équivalent. Suite du cours précédent.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 205 ou FRAN 213 ne peuvent obtenir de crédits pour ce cours.

FRAN 216 Cours de grammaire : niveau intermédiaire I (3 crédits)

Préalable: FRAN 212 ou l'équivalent. Ce cours s'adresse en particulier aux étudiantes et étudiants parlant français avec une certaine aisance et qui voudraient améliorer leur expression écrite par une étude des règles fondamentales de la grammaire et par de nombreux travaux pratiques.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 206 ou FRAN 207 ne peuvent obtenir de crédits pour ce cours.

FRAN 217 Cours de grammaire : niveau intermédiaire II (3 crédits)

Préalable : FRAN 216 ou l'équivalent. Suite du cours précédent.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 206 ou FRAN 207 ne peuvent obtenir de crédits pour ce cours.

FRAN 218 L'art de vivre au Québec I (6 crédits)

Préalable : FRAN 212 ou l'équivalent. Cours intensif qui a pour but principal de permettre à l'étudiante ou à l'étudiant de niveau intermédiaire de s'intégrer au milieu québécois, au moyen de discussions et d'activités dirigées par une professeure ou un professeur et animées par des monitrices-étudiantes et des moniteursétudiants francophones. Pratique systématique du français en classe. Participation en petits groupes à des activités culturelles dépassant le cadre scolaire.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 208 ou FRAN 300 ne peuvent obtenir de crédits pour ce cours.

FRAN 254 Langue et condition des femmes au Québec (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Ce cours vise deux objectifs : examiner les différents aspects de la condition des femmes au Québec (évolution, débat actuel, etc.) et permettre à l'étudiante et à l'étudiant de se donner la compétence langagière en vue d'une participation au débat sur la condition féminine. Le cours sera structuré autour de certains thèmes ou dossiers tels que le rôle des organismes politiques, gouvernementaux et syndicaux dans le débat et les questions d'actualité sociale concernant la femme : la publicité sexiste, la femme et la politique, la femme au foyer et la femme au travail, la femme et les arts, la santé des femmes, la pornographie, le viol, la violence, etc. N.B.: Les étudiantes et étudiants francophones ne peuvent s'inscrire à ce cours.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 255 ne peuvent obtenir de crédits pour ce cours.

FRAN 301 Langue française : niveau d'approfondissement I et II (6 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Ce cours d'approfondissement est destiné aux étudiantes et étudiants qui possèdent déjà une bonne connaissance du français et qui ont besoin d'améliorer leur expression écrite et orale. Pratique de la lecture, de la rédaction et de la grammaire.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 302 ou 303 ne peuvent obtenir de crédits pour ce cours.

FRAN 302 Langue française : niveau d'approfondissement I (3 crédits)

Préalable : FRAN 213 ou l'équivalent. Le cours d'approfondissement est destiné aux étudiantes et étudiants qui possèdent déjà une bonne connaissance du français et qui ont besoin d'améliorer leur expression écrite et orale. Pratique de la lecture, de la rédaction et de la grammaire. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 301 ne peuvent obtenir de crédits pour ce cours.

FRAN 303 Langue française : niveau d'approfondissement II

(3 crédits)

Préalable : FRAN 302 ou l'équivalent. Suite du cours FRAN 302.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 301 ne peuvent obtenir de crédits pour ce cours.

FRAN 305 Communication orale

(3 crédits)

Préalable : FRAN 213 ou l'équivalent. Étude des caractéristiques propres à la langue orale et au déroulement du discours. Initiation à l'identification des niveaux de langue et aux aspects affectifs et situationnels de la langue parlée. Présentations théoriques et applications pratiques sous forme d'exercices d'expression et de compréhension reliés à l'analyse de documents authentiques.

FRAN 306 Communication écrite

(3 crédits)

Préalable : FRAN 302 ou l'équivalent. Acquisition des techniques nécessaires à la rédaction. Étude des différents styles de langue écrite par opposition à ceux de la langue parlée. Pratique de l'analyse et du commentaire de texte.

FRAN 307 L'art de vivre au Québec II (3 crédits)

Préalable : FRÀN 213 ou l'équivalent. Suite du cours FRAN 218. Ce cours a pour but d'amener l'étudiante et l'étudiant à approfondir la matière du cours précédent. Les objectifs visés et les moyens pédagogiques mis en œuvre sont donc semblables à ceux du cours FRAN 218. Le cours s'adresse aux étudiantes et étudiants de niveau d'approfondissement.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 308 ne peuvent obtenir de crédits pour ce cours.

FRAN 318 Le français commercial I (3 crédits)

Préalable : FRAN 213 ou l'équivalent. Le cours vise à faciliter la communication efficace orale et écrite dans le domaine des affaires. Il comprend une révision des structures, mais l'effort principal porte sur l'acquisition des termes et tournures de la langue du commerce, de la banque et des affaires. On s'efforce d'enseigner ces termes en simulation de situations réelles, par ex. : au téléphone, entrevues, réunions, rédaction administrative et commerciale. On encourage les étudiantes et étudiants à entreprendre un projet individuel pour approfondir le vocabulaire de leur domaine particulier.

FRAN 319 Le français commercial II (3 crédits)

Préalable : FRAN 213 ou l'équivalent. Suite du cours FRAN 318.

FRAN 330 Introduction à la linguistique française I (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Introduc-

tion à l'analyse descriptive de la structure linguistique du français contemporain. Aperçus des aspects phonémiques, morphosyntaxiques et lexicaux de la langue considérée comme un système. Applications théoriques et pratiques. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 266 ne peuvent obtenir de crédits pour ce cours.

FRAN 331 Introduction à la linguistique française II (3 crédits)

Préalable : FRAN 330 ou l'équivalent. Suite du cours FRAN 330.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 267 ne peuvent obtenir de crédits pour ce cours.

FRAN 332 Phonétique française (3 crédits)

Préalable: FRAN 303 ou l'équivalent. Étude systématique des habitudes articulatoires du français en comparaison avec celles de l'anglais. Introduction aux principes de l'analyse phonologique: groupes consonantiques possibles ou impossibles dans les deux langues. Étude de l'aspect physiologique de la parole; propriétés des voyelles et des consonnes en français. Étude des phénomènes prosodiques; intonation, rythme, accent. Aperçu de la phonétique acoustique et expérimentale.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 264 ne peuvent obtenir de crédits pour ce cours.

FRAN 333 Histoire de la langue française (3 crédits)

Préalable: FRAN 303 ou l'équivalent. Le but de ce cours est de familiariser l'étudiante et l'étudiant avec les grands moments de la langue (Concile de Tours, Édit de Villers Cotterêts, etc.) afin de leur donner une vue panoramique et diachronique de l'évolution du français.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 269 ne peuvent obtenir de crédits pour ce cours.

FRAN 334 Le vocabulaire français (3 crédits)

Préalable: FRAN 303 ou l'équivalent. Ce cours propose une présentation méthodique des divers aspects du vocabulaire français. Il comporte quatre parties: introduction générale et présentation des outils bibliographiques; origine et évolution des mots; procédés de création lexicale; variation sémantique. Les travaux prendront la forme d'exercices variés de vocabulaire, d'analyses de textes et de recherches lexicales.

N.B.: Avec le cours FRAN 306, ce cours constituerait une bonne préparation aux cours de langue de niveau 400.

FRAN 373 Le cinéma français I (6 crédits)

Ce cours, abondamment illustré de films ou d'extraits de films, retrace, en tout ou en partie, l'histoire du septième art dans ses manifestations les plus originales et les plus caractéristiques. FRAN 374 Le cinéma français II (6 crédits) Les étudiantes et étudiants s'inscrivant pour la deuxième fois au cours de FRAN 373 obtiennent les crédits FRAN 374.

FRAN 398 Étude d'un sujet particulier (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

FRAN 400 Langue française : niveau de perfectionnement I (3 crédits)

Préalable: FRAN 303 ou l'équivalent; FRAN 306 recommandé si le résultat en FRAN 303 est de 2.00 ou moins. Cours avancé de langue, axé sur l'étude de la grammaire et de la stylistique françaises, permettant à une étudiante ou un étudiant qui possède déjà une connaissance approfondie de la langue de corriger ses lacunes, de nuancer son expression et d'explorer les possibilités créatrices du langage.

FRAN 401 Langue française : niveau de perfectionnement II (3 crédits)

Préalable : FRAN 400 ou l'équivalent. Cours avancé de langue et de composition, axé sur l'étude de l'utilisation stylistique des temps et d'un certain nombre de techniques, permettant aux étudiantes et aux étudiants d'écrire un texte soigné.

FRAN 402 Initiation à la composition avancée (6 crédits)

Préalable: FRAN 303 ou l'équivalent. Révision de la grammaire. Techniques de mise en œuvre des moyens d'expression écrite et orale. Étude des différentes méthodes d'analyse et de composition, y compris la dissertation. Méthodologie de la présentation des travaux.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 324 ne peuvent obtenir de crédits pour ce cours.

FRAN 403 Rédaction avancée (3 crédits)
Préalable: FRAN 400 et 401 ou 402 ou 406 et
407. Ce cours vise à faire acquérir à l'étudiante
ou l'étudiant qui a déjà une bonne maîtrise de
la grammaire l'habileté à rédiger des textes de
formes diverses. À partir d'une pratique intense
de l'écriture, l'étudiante ou l'étudiant apprendra
à rédiger des textes qui répondent à un but
spécifique de la communication.

FRAN 406 Le code grammatical I (3 crédits)

Préalable: FRAN 303 ou l'équivalent. Étude des règles fondamentales de la grammaire française à l'aide d'exercices d'analyse et de construction de phrases, ayant pour but la correction de l'orthographe et de la syntaxe.

FRAN 407 Le code grammatical II (3 crédits)

Préalable : FRÀN 406 ou l'équivalent. Ce cours a pour but de fixer définitivement les connaissances grammaticales pratiques des étudiantes et étudiants, en particulier de celles ou ceux qui envisagent de poursuivre leurs études de français à un niveau supérieur. La norme étudiée dans ce cours tiendra compte à la fois des principes de la grammaire traditionnelle et des progrès récents dans l'étude de la langue. L'étude des unités d'expression mènera, par des exercices pratiques d'analyse fonctionnelle, à l'examen approfondi de certains points de stylistique.

FRAN 408 Le code oratoire (3 crédits) Préalable : FRAN 303 ou l'équivalent. Ce cours avancé de langue s'adresse aux étudiantes et étudiants cherchant à acquérir une habileté à parler en public ou à la développer. Il porte à la fois sur la transmission et la création de discours oraux : étude des caractéristiques de la lanque « oratoire »; acquisition des techniques et des moyens linguistiques appropriés pour établir une communication structurée et vivante avec un auditoire; introduction à la rhétorique et création de discours argumentatifs. Les séances de travaux pratiques permettent aux étudiantes et étudiants d'approfondir les techniques enseignées pendant le cours.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 404 ou 405 ne peuvent obtenir de crédits pour ce cours.

FRAN 409 Cours libre de traduction I (3 crédits)

Préalable: Six crédits parmi FRAN 304; FRAN 305; FRAN 306; FRAN 307; FRAN 400; FRAN 401; ou autorisation du département. Étude systématique des anglicismes; notions de méthodologie de la traduction; étude de quelques aspects de la stylistique comparée du français et de l'anglais; travaux pratiques de traduction de l'anglais au français.

N.B.: Ce cours est destiné particulièrement, mais non exclusivement, aux étudiantes et étudiants qui ne se spécialisent pas en traduction.

FRAN 412 Le français des situations administratives et juridiques

(3 crédits)

Préalable : FRAN 303, ou l'équivalent. Le cours s'adresse aux étudiantes et étudiants qui, dans leur profession ou celle à laquelle elles ou ils se préparent, doivent utiliser le vocabulaire de l'appareil judiciaire et la terminologie des différentes branches du droit. On étudiera les situations telles que le conflit locataire-propriétaire, les problèmes d'assurance, le contrat de mariage, etc. Par une étude théorique et pratique de divers litiges, par une recherche individuelle et en jouant les rôles de divers personnages en situation, les étudiantes et étudiants approfondiront leurs connaissances de la langue du droit et apprendront à l'utiliser.

FRAN 414 Le français de la technologie (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants qui s'intéressent à la langue technique. Les étudiantes et étudiants se familiariseront avec la terminologie, la syntaxe et le style propres à certains domaines de la technologie. Les travaux comprendront des exercices pratiques de vocabulaire, de style et de rédaction dont le but sera de faciliter l'expression exacte de notions techniques.

FRAN 415 Rédaction technique (3 crédits) Préalable : FRAN 414 ou l'équivalent. Dans ce cours qui s'adresse aux étudiantes et étudiants déjà initiés à certains domaines de la technologie, on étudiera la rédaction de documents techniques tels que les résumés de textes, les spécifications, devis, appels d'offres, modes d'emploi, etc. L'effort principal portera sur la rédaction de rapports techniques.

Le français de l'économie et **FRAN 418** du marketing (3 crédits)

Préalable: FRAN 303 ou l'équivalent. L'étudiante et l'étudiant se familiariseront avec des concepts du système économique au moyen d'une communication axée sur des réalités économiques québécoises, canadiennes et mondiales. Étude approfondie du vocabulaire spécialisé, travaux de rédaction et présentation d'exposés à partir d'une analyse d'articles et de films didactiques sélectionnés dans le domaine.

Le français de la finance et de **FRAN 419** la gestion (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Ce cours vise à perfectionner l'usage du français spécialisé écrit et oral utilisé dans les relations d'affaires par un examen des difficultés de la langue française et l'étude de concepts à partir d'une documentation axée sur la science de la gestion et de la finance. Étude approfondie du vocabulaire spécialisé et rédaction de travaux dans le contexte des divers domaines de la gestion administrative, financière et celle des ressources humaines.

FRAN 466 Histoire de la langue française au Québec (3 crédits)

Préalable : FRAN 400 ou l'équivalent. Aperçu de l'évolution du français au Québec, du XVIIe siècle à nos jours. Étude de la formation du français québécois et des influences internes et externes qu'il a subies au cours du temps. À l'aide de documents provenant d'époques successives, on s'attachera à définir ce qui caractérise les différents états du français parlé et écrit au Québec, sur les plans phonétique, syntaxique et lexical.

FRAN 468 Étude de la norme (3 crédits) Préalable: FRAN 400. Étude des facteurs politiques, sociologiques et psychologiques contribuant à la notion de norme. Analyse et description des écarts par rapport à la norme. Travaux pratiques d'enquête.

FRAN 469 Sémantique française (3 crédits)

Préalable : FRAN 400. Étude formelle de la signification et de la segmentation du sens en français fondée sur une approche sémiotique de la langue. L'étudiante et l'étudiant feront l'apprentissage de méthodes d'analyse leur permettant d'inventorier les effets de sens et de les ordonner en fonction de critères objectifs.

FRAN 470 Stylistique avancée (3 crédits)
Préalable: FRAN 400 ou autorisation du département. Étude de l'articulation entre des procédés d'expression lexicologiques, syntaxiques et rhétoriques, et leurs effets sémantiques. Ce cours permettra aux étudiantes et aux étudiants d'améliorer leur capacité à rédiger différents types d'écrits structurés et nuancés.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 366 ne peuvent obtenir de crédits pour ce cours.

FRAN 471 Questions actuelles en linguistique française (3 crédits)

Préalable: FRAN 400 ou autorisation du département. Étude d'une question particulière du domaine de la linguistique, intéressant les étudiantes et les étudiants en langue, littérature, traduction et didactique. Pourront être abordées les méthodologies suivantes: analyse du discours, théorie de l'énonciation, linguistique du texte, pragmatique, linguistique statistique, psycholinguistique, lexicologie.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 367 ne peuvent obtenir de crédits pour ce cours.

FRAN 481 Évolution de l'enseignement du français : principes et méthodes (3 crédits)

Préalable: FRAN 400 ou l'équivalent. Panorama historique de l'enseignement du français langue maternelle, langue étrangère et langue seconde. Une attention particulière sera portée à la conception de la langue et de la culture à la base des méthodes et des programmes d'enseignement. Étude de l'état actuel de l'enseignement du français dans le monde.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 381 ne peuvent obtenir de crédits pour ce cours

FRAN 482 Le matériel didactique : analyse et création (3 crédits)

Préalable: FRAN 400 ou l'équivalent. Étude critique du matériel utilisé pour l'enseignement du français dans des cadres et à des niveaux de compétence divers. Analyse comparative du matériel destiné à l'enseignement du français langue maternelle et du français langue seconde ou étrangère. Application de ces connaissances à la création et à l'adaptation de matériel didactique.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 382 ne peuvent obtenir de crédits pour ce cours.

FRAN 485 Étude d'un sujet particulier en didactique du français

(3 crédits)

Préalable : FRAN 400 ou l'équivalent. Étude

approfondie d'un aspect particulier de l'enseignement et de l'apprentissage du français. Parmi les sujets possibles : enseignement de la grammaire, de la lecture, du vocabulaire, de la culture; évaluation de l'apprentissage; acquisition du français langue maternelle et langue seconde; enseignement du français et alphabétisation; pédagogie de l'interculturel.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 385 ne peuvent obtenir de crédits pour ce cours.

FRAN 486 Pratiques d'enseignement (3 crédits)

Préalable: FRAN 400 ou l'équivalent. Travaux pratiques: préparation de plans de cours, élaboration de leçons-types, initiation aux techniques d'animation de groupe et aux méthodes d'évaluation de l'apprentissage; mise en application dans des classes de français langue seconde. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 488 ne peuvent obtenir de crédits pour ce cours.

FRAN 491 Tutorat en langue, linguistique ou didactique (3 crédits)

Préalable : 12 crédits de langue, de linguistique ou de didactique au niveau « 400 ». Étude d'un sujet particulier dans le domaine de la langue, de la linguistique ou de la didactique.

FRAN 498 Étude avancée d'un sujet particulier (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

Littérature

FLIT 220 Textes littéraires (3 crédits)

Préalable: FRAN 213, 215 ou l'équivalent. Au moyen d'un choix de nouvelles, romans, pièces de théâtre et poèmes de la francophonie, l'étudiante ou l'étudiant apprendra à « lire » et à apprécier les caractéristiques des différents genres.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 220 ne peuvent obtenir de crédits pour ce cours.

FLIT 230 Introduction à la culture francophone (3 crédits)

Ce cours vise à familiariser les étudiantes et étudiants non francophones à la culture francophone et à sa diversité. Une étude sociale, historique, linguistique et culturelle permettra aux étudiants et étudiantes de s'interroger sur ce qu'est la francophonie et sur la spécificité francophone.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 270 ne peuvent obtenir de crédits pour ce cours.

FLIT 240 Introduction à la littérature francophone (3 crédits)

Ce cours vise à familiariser les étudiantes et étudiants non francophones à la littérature d'expression française. On lira dans ce cours des œuvres représentatives de la diversité du monde francophone.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 271 ne peuvent obtenir de crédits pour ce cours.

FLIT 250 Culture populaire en France et au Québec (3 crédits)

Étude comparée de la culture populaire en France et au Québec de 1967 à nos jours : les événements historiques, la littérature, la presse, la mode, la chanson, la télévision, le cinéma, la publicité.

FLIT 298 Étude d'un sujet particulier (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le Undergraduate Class Schedule.

N.B.: Les étudiantes et étudiants qui ont suivi un cours FRAN 298 avant le même contenu ne peuvent obtenir de crédits pour ce cours.

Littérature et culture françaises **FLIT 300** du Moyen Âge au XVIIe siècle (3 crédits)

Aperçu général de la littérature française du Moyen Âge, de la Renaissance et du XVII^e siècle et du contexte historique, social et culturel qui a donné naissance aux œuvres de l'époque. N.B.: Les étudiantes et étudiants qui ont suivi

FRAN 320 ou 321 ne peuvent obtenir de crédits

FLIT 302 Littérature et culture françaises du XVIIIe au XXe siècles (3 crédits)

pour ce cours.

Aperçu général de la littérature française des XVIIIe, XIXe et XXe siècles et du contexte historique, social et culturel qui a donné naissance aux œuvres de l'époque.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 320 ou 322 ne peuvent obtenir de crédits pour ce cours.

FLIT 303 Culture et littérature québécoises de 1534 à 1900 (3 crédits)

Panorama de la littérature québécoise, de la Nouvelle-France à la fin du XIX^e siècle, vue dans une perspective socio-historique. Par l'étude de textes significatifs, on retracera le processus historique de différenciation et d'affirmation collective des Québécoises et Québécois.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 251 ou 252 ne peuvent obtenir de crédits pour ce cours.

FLIT 305 Culture et littérature québécoises : le XX^e siècle (3 crédits)

Panorama de la littérature québécoise du XX^e siècle vue dans une perspective sociohistorique. Étude des grandes étapes de la

production littéraire avec, comme toile de fond, un aperçu général de l'histoire politique, économique, sociale et culturelle du Québec. Étude des principaux courants de pensée.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 251 ou 253 ne peuvent obtenir de crédits pour ce cours.

FLIT 308 Le quotidien de la francophonie (3 crédits)

Étude de la culture de pays francophones (principalement de l'Afrique, des Antilles ou d'autres pays entièrement ou partiellement francophones). Ce cours a pour but, au moyen de documents imprimés et audio-visuels, de faire connaître les conditions socio-politiques de ces pays plutôt que l'histoire des faits exceptionnels.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 364 ne peuvent obtenir de crédits pour ce cours.

Le Moyen Âge (3 crédits) **FLIT 310**

Introduction à la lecture des premières œuvres de la littérature française : chansons de geste, lais, romans, poésie, théâtre, fabliaux et nouvelles, chroniques et écrits didactiques. Présentation de leur contexte culturel : le monde féodal et la société urbaine, la culture savante et la culture populaire, les milieux intellectuels et

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 420 ne peuvent obtenir de crédits pour ce cours.

FLIT 312 La Renaissance française : questions et perspectives (3 crédits)

Étude des mythes, des valeurs, des symboles qui structurent le monde mental des « acteurs » de la Renaissance française. Les cercles et les foyers de rayonnement intellectuel notables (la Cour, Lyon, les collèges) sont étudiés en détail. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 425 ne peuvent obtenir de crédits pour ce cours.

FLIT 314 Le XVII^e siècle : l'univers théâtral (3 crédits)

Étude de la pastorale, de la comédie, de la tragédie et de la tragi-comédie. Importance du théâtre au XVIIe siècle : scénographie, poétique et dramaturgie. Sources et réception des œuvres dramatiques.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 429 ne peuvent obtenir de crédits pour ce cours.

FLIT 316 La naissance et la diffusion des Lumières en France

(3 crédits)

Analyse de l'émergence d'un pouvoir intellectuel de plus en plus autonome en France au XVIIIe siècle, par rapport à l'Église, par rapport à l'État. Étude du cadre historique et littéraire dans lequel s'est formée et affirmée la

philosophie des Lumières.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 432 ne peuvent obtenir de crédits pour ce cours.

FLIT 318 Le XIX^e siècle : roman et société (3 crédits)

Étude du rôle du progrès (science, socialisme, utopies) dans la constitution du roman du XIX^e siècle. Analyse de l'intégration dans la littérature de diverses formes discursives qui permettent au roman social de refléter les transformations historiques et politiques.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 440 ne peuvent obtenir de crédits pour ce cours.

FLIT 320 Le XX^e siècle : les métamorphoses du roman

(3 crédits)

Étude de l'évolution du roman au XX^e siècle en France et de l'émergence de nouvelles structures romanesques. De la sotie gidienne au Nouveau Roman, le roman n'a cessé de redéfinir son genre, d'emprunter à d'autres discours narratifs et de faire éclater la forme du roman réaliste. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 446 ne peuvent obtenir de crédits pour ce cours.

FLIT 341 Le roman québécois jusqu'en 1960 (3 crédits)

La pratique romanesque de 1900 à 1960 dans la réalité socio-politique et culturelle. Du roman de la fidélité au roman de l'interrogation, en passant par le roman d'observation, le roman de la critique sociale et le roman de l'exploration intérieure. (Re)lecture des œuvres marquantes dont plusieurs, grâce à la radio, au cinéma et à la télévision, ont joué un rôle important dans la formation de l'imaginaire québécois.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 352 ne peuvent obtenir de crédits pour ce cours.

FLIT 343 Le roman québécois contemporain (3 crédits)

La pratique romanesque depuis la Révolution tranquille : évolutions et orientations. On insistera sur les aspects suivants : rupture, modernité et post-modernité; poétique et politique; diversité des pratiques : des recherches formelles aux « belles histoires »; éclatement de l'espace fictionnel, sous la poussée notamment des écritures de femmes et des écritures (im)migrantes. La lecture de textes marquants sera proposée aux étudiants et étudiantes.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 353 ne peuvent obtenir de crédits pour ce cours.

FLIT 345 Le théâtre québécois jusqu'en 1960 (3 crédits)

Vue d'ensemble du phénomène théâtral, des origines à 1960 : conditions dans lesquelles est né et s'est développé le théâtre : genres affec-

tionnés au XIX^e siècle et au début du XX^e : théâtre historique, mélodrame, burlesque; « les premières modernités » (1930–1965). Une attention particulière sera accordée à cette dernière période dont l'effervescence favorise la naissance du théâtre québécois moderne, signalée par l'apparition de nombreuses fondations institutionnelles et par l'entrée en scène de Gélinas, puis de Dubé, Ferron, Gauvreau, Languirand, Loranger. Un choix de textes sera proposé à l'étude.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 356 ne peuvent obtenir de crédits pour ce cours.

FLIT 347 Le théâtre québécois contemporain (3 crédits)

Évolution du théâtre québécois depuis 1960 : théories et pratiques. Identification et étude des principaux axes de son développement : « nouveau » théâtre québécois; création collective et engagement; théâtre expérimental; théâtre de femmes; théâtre des frontières du langage et de l'identité; théâtre et publics, etc. Situation du théâtre dans le réseau des discours esthétiques et socio-culturels. Étude de dramaturges et de pièces marquants. En plus d'avoir recours aux textes, ce cours s'appuiera d'une façon particulière sur la production montréalaise courante. N.B. : Les étudiantes et étudiants qui ont suivi FRAN 357 ne peuvent obtenir de crédits pour ce cours.

FLIT 349 *L'essai au Québec* (3 crédits) Étude des grands thèmes et de l'évolution des formes de la pensée québécoise à travers l'essai. Analyse des regards pluriels portés sur la culture, la politique. Évaluation de ces composantes mouvantes dans la configuration de la société québécoise actuelle. Lecture d'œuvres représentatives.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 358 ne peuvent obtenir de crédits pour ce cours.

FLIT 360 Littérature de la francophonie au féminin (3 crédits)

Introduction à l'écriture des femmes francophones, principalement d'Afrique et des Caraïbes ou d'autres pays entièrement ou partiellement francophones. Analyse du regard particulier qu'elles posent sur elles-mêmes et sur la société. Étude des rapports qu'elles entretiennent avec le français (langue maternelle, langue d'usage, langue imposée...). Évaluation de l'apport spécifique de ces femmes à la littérature de leur pays.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 360 ne peuvent obtenir de crédits pour ce cours.

FLIT 362 Littérature maghrébine (3 crédits)

Histoire de la littérature marocaine, algérienne et tunisienne écrite directement en français par des écrivains d'origine arabe ou berbère.

Marquée par les influences combinées de la culture française et de l'Islam, cette littérature sera étudiée dans son développement et sa spécificité. Lecture et analyse d'œuvres marquantes datant de l'époque coloniale jusqu'à nos jours.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 256 ne peuvent obtenir de crédits pour ce cours

FLIT 364 Littératures africaine et antillaise (3 crédits)

Histoire et développement de la littérature de langue française des Antilles et d'Afrique subsaharienne au XX^e siècle. Issue de l'époque coloniale, cette littérature sera étudiée en fonction de la grande mutation des années soixante et de la problématique géopolitique des années qui ont suivi les indépendances. Lecture et analyse d'œuvres marquantes provenant de divers pays membres de la francophonie.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 257 ne peuvent obtenir de crédits pour ce cours.

FLIT 370 Les genres narratifs (3 crédits) Étude comparée de plusieurs genres narratifs (réalisme, fantastique, etc.) en vue d'en dégager les traits thématiques et discursifs distinctifs. Les genres étudiés sont replacés dans l'histoire de leur émergence pour être analysés dans leur état contemporain.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 370 ne peuvent obtenir de crédits pour ce cours.

FLIT 372 Le genre poétique (3 crédits)
Description de la poésie de langue française
dans ses aspects formels et thématiques. Étude
de la poétique (vers régulier, vers libre, formes
fixes, poèmes en prose, poésie expérimentale).
Lecture et analyse de textes choisis en fonction
de leur importance historique ou de leur intérêt
propre.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 37I ne peuvent obtenir de crédits pour ce cours.

FLIT 374 Le genre dramatique : analyses et pratiques

(3 crédits)

Étude des caractéristiques du théâtre en tant que genre. Analyse de sa fonction littéraire et sociale et de la place qu'il occupe dans l'évolution de la théorie esthétique. On aura recours à un choix de textes dramatiques et théoriques. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 372 ne peuvent obtenir de crédits pour ce cours.

FLIT 380 Texte et image (3 crédits) Analyse des liens qui unissent le texte et l'image et qui peuvent se manifester sous diverses formes artistiques. On s'attachera à une époque et à une problématique particulières qui permettront de mieux comprendre les rapports du visuel et du littéraire.

FLIT 410 La naissance du roman au Moyen Âge (3 crédits)

Le roman naissant et la société courtoise (XIIe siècle). Sources et thématiques : l'Antiquité, la « matière de Bretagne », l'Orient. Motifs, personnages et structures narratives, les grands cycles (XIIIe siècle) : Arthur, Tristan, Lancelot, Le Graal.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 421 ne peuvent obtenir de crédits pour ce cours.

FLIT 412 La création littéraire en France au XVI^e siècle (3 crédits)

La création littéraire (en prose et en poésie) comme cristallisation, polarisation de l'imaginaire de la Renaissance et comme référence à l'humanisme. Étude des œuvres majeures du XVI° siècle dans leurs rapports au pétrarquisme, au maniérisme, au baroque.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 426 ne peuvent obtenir de crédits pour ce cours.

FLIT 414 L'écriture moraliste et intime au XVII^e siècle (3 crédits)

Émergence du monde intérieur (moral et spirituel) dans les récits spéculaires des moralistes, mémorialistes et épistoliers. Cosmographie, cartographie, anatomie et écriture moraliste. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 431 ne peuvent obtenir de crédits pour ce cours.

FLIT 416 La création littéraire au XVIII^e siècle (3 crédits)

La vitalité du conte, du roman, du théâtre est indéniable au XVIII^e siècle, siècle de tensions, de confrontations, de rêve. Le militantisme des écrivains-philosophes s'accompagne d'une idéologie de bonheur, de la liberté. Analyse des œuvres qui ponctuent l'évolution littéraire et philosophique de ce siècle.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 435 ne peuvent obtenir de crédits pour ce cours.

FLIT 418 Du Romantisme à l'orée de la modernité (3 crédits)

À partir du « mal de siècle » français, analyse des transformations successives du rôle des écrivains (poètes, dramaturges, romanciers, essayistes) dans une société marquée par une industrialisation croissante, de nouvelles découvertes scientifiques et d'importants bouleversements socio-politiques. Le choix de textes permettra d'étudier les différentes voies empruntées par les Romantiques (repli sur soi, engagement social, renouvellement des genres), la participation plus active des femmes à l'institution littéraire, le passage au réalisme et les premières transformations de celui-ci.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 438 et 439 ne peuvent obtenir de crédits pour ce cours.

FLIT 420 Du réalisme à l'esprit « fin de siècle » (3 crédits)

Étude des multiples tendances qui caractérisent la deuxième partie du dix-neuvième siècle. Cette période est marquée par le passage du réalisme au naturalisme, par l'apogée et la mise en question du roman « bien construit ». Elle verra aussi la naissance de nouveaux genres, tels que le roman policier ou d'anticipation, ainsi que l'éclatement des formes poétiques. Les dernières années seront aussi celles de la décadence et de l'esprit « fin-de-siècle ».

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 441 ne peuvent obtenir de crédits pour ce cours.

FLIT 422 La poésie et le théâtre des avant-gardes (3 crédits)

Analyse de la notion de rupture avec la littérature contemporaine à l'œuvre dans divers courants poétiques et dramaturgiques tout au long du XX° siècle. À travers les œuvres des dadaïstes, des surréalistes, des lettristes, des oulipiens, des tenants du théâtre existentialiste, absurde ou encore du théâtre de la cruauté, on retrouve ce même souci de rompre avec l'espace littéraire contemporain, de renouveler la poésie et le théâtre par des textes de création, des critiques littéraires ou encore des manifestes.

FLIT 424 La littérature française actuelle (3 crédits)

Aperçu de la littérature française des trente dernières années, marquée par plusieurs phénomènes, dont la reconfiguration des genres et des structures, la post-modernité, l'écriture au féminin, la revendication de la différence, la réhabilitation du « polar », la remise en question de la théorie et l'émergence d'une multi-culture qui témoigne des phénomènes migratoires inhérents au « village global ».

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 448 ne peuvent obtenir de crédits pour ce cours.

FLIT 441 Imaginaire québécois : mythes et symboles (3 crédits)

Identification, description, évolution des grands symboles et archétypes de l'imaginaire québécois en littérature. On se servira de textes relevant aussi bien de la littérature canonique que de la littérature dite « populaire » ou appartenant à des genres mineurs.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 450 ne peuvent obtenir de crédits pour ce cours.

FLIT 443 La poésie québécoise (3 crédits)

Histoire de la poésie de langue française au Québec, des origines à nos jours. Étude des mouvements et des formes à travers le temps, et lecture des œuvres les plus significatives. On insistera sur l'émergence progressive de la modernité et sur la spécificité des thèmes du

répertoire poétique québécois, au confluent de l'histoire et des bouleversements sociaux. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 354 ou 355 ne peuvent obtenir de crédits pour ce cours.

FLIT 445 Le fantastique et la littérature populaire (3 crédits)

La présence du fantastique dans la littérature québécoise et l'influence de la tradition populaire au niveau des thèmes et des structures. Textes choisis dans l'ensemble de la production littéraire. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 453 ne peuvent obtenir de crédits pour ce cours.

FLIT 447 Les Voix de Montréal (3 crédits)

À travers des textes d'écrivaines et d'écrivains montréalais, on cherchera à rendre compte de la dimension plurielle de l'écriture et de la culture québécoises. On privilégiera les parcours transculturels des auteures et auteurs venus d'un ailleurs géographique et culturel, mais qui inscrivent leurs différences dans le texte québécois par la publication ou la traduction de leurs œuvres en français.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 460 ne peuvent obtenir de crédits pour ce cours.

FLIT 449 Littérature québécoise -Canadian Literature (3 crédits)

Étude comparée des littératures québécoise et canadienne-anglaise. Analyse thématique, idéologique et stylistique. Examen des similitudes, des analogies et des traits distinctifs. Textes choisis à la fois parmi les œuvres traditionnelles et les œuvres contemporaines.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 455 ou 456 ne peuvent obtenir de crédits pour ce cours.

FLIT 450 Paralittératures (3 crédits)

Étude de quelques genres romanesques (roman d'aventures, roman d'amour, policier, série noire, espionnage, science-fiction...) maintenus en marge de la littérature dans les cultures francophones contemporaines. Classements des textes dans l'espace social en fonction des discours dont ils sont porteurs. Analyse sociologique des conditions de production, de diffusion et de consommation des textes.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 454 ne peuvent obtenir de crédits pour ce cours.

FLIT 452 Littérature pour la jeunesse (3 crédits)

L'évolution de la littérature produite ou adaptée pour la jeunesse, du XVII^e siècle à la fin du XX^e siècle. Son état actuel; rapports avec la littérature générale : aspects éthiques, esthétiques et didactiques. Étude approfondie d'œuvres marquantes de la francophonie, particulièrement au Québec.

FLIT 460 Littératures européennes d'expression française (3 crédits)

Cours d'introduction, à partir de textes littéraires et autres documents imprimés ou audio-visuels, à la culture de pays européens entièrement ou partiellement de langue française, à l'exception de la France.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 462 ne peuvent obtenir de crédits pour ce cours.

FLIT 462 Littératures canadiennesfrançaises (3 crédits)

Cours d'introduction, à partir de textes littéraires et autres documents imprimés ou audio-visuels, à la culture des francophones canadiens à l'extérieur du Québec.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 463 ne peuvent obtenir de crédits pour ce cours.

FLIT 471 La littérature québécoise au féminin (3 crédits)

Étude des principales écrivaines québécoises et de l'évolution de la conscience féminine. Analyse de la représentation qu'elles font d'elles-mêmes et du monde, de leurs modes d'expression et de l'influence du féminisme sur le littéraire. Textes choisis dans l'ensemble de la production des femmes, avec une attention particulière à l'écriture des jeunes écrivaines.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 451 ne peuvent obtenir de crédits pour ce cours.

FLIT 472 La littérature française au féminin : perspective historique (3 crédits)

À partir de manifestes et d'œuvres de création, on retracera différentes manifestations de la prise de conscience « féministe » chez les écrivaines françaises, ainsi que les solutions envisagées aux problèmes posés. Ce cours permettra de considérer les tendances actuelles dans une perspective historique.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 476 ne peuvent obtenir de crédits pour ce cours.

FLIT 474 La littérature française au féminin : nos contemporaines (3 crédits)

Ce cours portera sur l'éclatement qui caractérise l'écriture au féminin à l'heure actuelle. On étudiera différents concepts tels que la « prise de parole », la valorisation de l'*anima*, le renversement des mythes anciens, ainsi que la révolution formelle et stylistique qui accompagne cet éclatement.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 477 ne peuvent obtenir de crédits pour ce cours.

FLIT 480 Approches critiques du texte (3 crédits)

Étude de méthodes diverses choisies parmi les

théories formaliste, structuraliste, philosophique, sociologique, sémiotique, psychanalytique, herméneutique, stylistique et philologique. Application des méthodes à plusieurs types de textes. N.B.: Les étudiantes et étudiants qui ont suivi FRAN 479 ne peuvent obtenir de crédits pour ce cours.

FLIT 494 Tutorat en littérature (3 crédits) Préalable : 12 crédits en littérature et autorisation du département. Étude d'un sujet particulier dans le domaine de la littérature.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 494 ne peuvent obtenir de crédits pour ce cours.

FLIT 495 Tutorat en littérature (3 crédits)

Préalable : 12 crédits en littérature et autorisation du département. Étude d'un sujet particulier dans le domaine de la littérature.

N.B.: Toute étudiante et tout étudiant s'inscrivant pour la seconde fois au cours FLIT 494 obtient les crédits FLIT 495.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 495 ne peuvent obtenir de crédits pour ce cours.

FLIT 496 Recherche dirigée (6 crédits) Préalable: 12 crédits dans la spécialité et autorisation du département. Ce cours n'est ouvert qu'aux étudiantes et étudiants des programmes de majeure, de spécialisation ou d'honneurs. Il offre l'occasion d'approfondir l'étude d'un sujet à déterminer par l'étudiante ou l'étudiant en accord avec sa conseillère ou son conseiller et/ou une professeure ou un professeur du département. Chaque étudiante et étudiant exécute des travaux individuels sous le contrôle de la professeure ou du professeur spécialiste de la matière.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 496 ne peuvent obtenir de crédits pour ce cours.

Traduction

FTRA 200 Méthodologie de la traduction (3 crédits)

Préalable : ENGL 207 et FRAN 306 ou équivalent. Ce cours a pour but d'initier l'étudiante et l'étudiant aux problèmes de la traduction. Il sera une introduction générale aux différentes approches du texte à traduire : analyse du discours, grammaire contrastive, stylistique comparée, terminologie et recherche documentaire.

N.B.: Ce cours comporte plusieurs sections, les unes réservées aux étudiantes et étudiants de l'option française, les autres à celles et ceux de l'option anglaise.

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 200 ne peuvent obtenir de crédits pour ce cours.

FTRA 201 Traduction générale du français à l'anglais (3 crédits)

Préalable : FTRA 200. Traduction du français à l'anglais de textes généraux et analyse des

problèmes liés au transfert linguistique. (A) N.B.: Les étudiantes et étudiants qui ont suivi TRAD 201 ou 202 ne peuvent obtenir de crédits pour ce cours.

FTRA 202 Traduction générale de l'anglais au français (3 crédits)

Préalable: FTRA 200. Traduction de l'anglais au français de textes généraux et analyse des problèmes liés au transfert linguistique. (F) N.B.: Les étudiantes et étudiants qui ont suivi TRAD 201 ou 202 ne peuvent obtenir de crédits pour ce cours.

FTRA 203 L'anglais en contact avec le français au Québec (3 crédits)

Ce cours s'adresse aux étudiantes et étudiants anglophones en traduction, langue, littérature et didactique. Il les sensibilisera aux problèmes liés au contact de l'anglais avec le français au Québec et leur permettra de corriger leurs propres erreurs de façon systématique. Le cours est axé sur la langue écrite et on travaillera uniquement sur des textes journalistiques.

FTRA 204 Le français en contact avec l'anglais au Québec (3 crédits)

Ce cours s'adresse aux étudiantes et étudiants francophones en traduction, langue, littérature et didactique. Il les sensibilisera aux problèmes liés au contact du français avec l'anglais au Québec et leur permettra de corriger leurs propres erreurs de façon systématique. Le cours est axé sur la langue écrite et on travaillera uniquement sur des textes journalistiques.

FTRA 298 Étude d'un sujet particulier (3 crédits)

N.B.: Les étudiantes et étudiants qui ont suivi un cours TRAD 298 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 299 Étude d'un sujet particulier (6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule.*

N.B.: Les étudiantes et étudiants qui ont suivi un cours TRAD 299 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 301 Traduction littéraire du français à l'anglais (3 crédits)

Préalable: FTRA 201. Sensibilisation aux problèmes spécifiques à la traduction littéraire. Travaux pratiques: traduction de textes de genres variés. (A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 301 ou 302 ne peuvent obtenir de crédits pour ce cours.

FTRA 304 Traduction littéraire de l'anglais au français (3 crédits)

Préalable : FTRA 202. Sensibilisation aux problèmes spécifiques à la traduction littéraire.

Travaux pratiques : traduction de textes de genres variés. (F)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 303 ou 304 ne peuvent obtenir de crédits pour ce cours.

FTRA 310 Initiation à la recherche documentaire et terminologique (3 crédits)

Préalable: FTRA 201 ou 202. Le cours fournit les outils permettant de repérer les problèmes de terminologie en traduction. Sont traités: les cheminements documentaire et terminologique (terminologie bilingue ou unilingue, langues de spécialités); la création de produits terminographiques (surtout thématiques); l'intervention linguistique et ses modalités (perspective sociolinguistique). (F/A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 310 ne peuvent obtenir de crédits pour ce cours.

FTRA 311 Terminologie avancée (3 crédits)

Préalable: FTRA 310. Le cours porte sur certaines difficultés fines en terminologie et en terminographie: synonymie, définition, marques linguistiques, marques sociales. Il aborde des notions de normalisation et constitue une introduction à la néologie. L'aspect pratique prend, entre autres, la forme de rédaction de dossiers de normalisation et de rapports de recherche(s) ponctuelle(s). (F/A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 311 ne peuvent obtenir de crédits pour ce cours.

FTRA 398 Étude d'un sujet particulier (3 crédits)

N.B.: Les étudiantes et étudiants qui ont suivi un cours TRAD 398 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 399 Étude d'un sujet particulier (6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B.: Les étudiantes et étudiants qui ont suivi un cours TRAD 399 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 401 Traduction littéraire avancée : du français à l'anglais (3 crédits)

Préalables: FTRA 301. Étude des différents principes et des différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques: analyse critique et comparaison de traductions et de leur original; traduction de textes français. (A) N.B.: Les étudiantes et étudiants qui ont suivi TRAD 401 ne peuvent obtenir de crédits pour ce cours.

FTRA 402 Traduction littéraire avancée : de l'anglais au français

(3 crédits)

Préalables : FTRA 304. Étude des différents principes et des différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques : analyse critique et comparaison de traductions et de leur original; traduction de textes anglais. (F) N.B.: Les étudiantes et étudiants qui ont suivi TRAD 402 ne peuvent obtenir de crédits pour ce cours.

FTRA 403 Traduction scientifique et technique du français à anglais (3 crédits)

Préalable: FTRA 201. Initiation aux différents problèmes de la traduction dans les langues de spécialités scientifiques et techniques (françaisanglais). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 403 ne peuvent obtenir de crédits pour ce cours.

FTRA 404 Traduction scientifique et technique de l'anglais au français (3 crédits)

Préalable: FTRA 202. Initiation aux différents problèmes de la traduction dans les langues de spécialités scientifiques et techniques (anglaisfrançais). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (F)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 404 ne peuvent obtenir de crédits pour ce cours.

FTRA 405 Traduction commerciale et juridique du français à l'anglais (3 crédits)

Préalable: FTRA 201. Initiation aux différents problèmes de la traduction dans les langues de spécialités de l'administration, du commerce et du droit (français-anglais). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (A) N.B.: Les étudiantes et étudiants qui ont suivi TRAD 405 ne peuvent obtenir de crédits pour

FTRA 406 Traduction commerciale et juridique de l'anglais au français (3 crédits)

ce cours.

Préalable: FTRA 202. Initiation aux différents problèmes de la traduction dans les langues de spécialités de l'administration, du commerce et du droit (anglais-français). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé. (F)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 406 ne peuvent obtenir de crédits pour ce cours.

FTRA 408 Adaptation publicitaire (3 crédits)

Préalable: FTRA 201 ou 202. Initiation à

l'adaptation de textes publicitaires. À partir d'exemples empruntés à la publicité écrite, radiophonique ou télévisée, les étudiantes et étudiants seront amenés à se familiariser avec les problèmes linguistiques, affectifs et sociaux soulevés par le travail d'adaptation. (F/A) N.B.: Les étudiantes et étudiants qui ont suivi TRAD 408 ne peuvent obtenir de crédits pour ce cours.

FTRA 409 Révision et correction en traduction (3 crédits)

Préalables : FTRA 301. Ce cours abordera les différentes méthodes de révision et de correction de textes rédigés ou traduits en anglais; il sensibilisera les étudiantes et étudiants aux aspects humains et techniques du métier de réviseure et réviseur; on touchera aussi aux problèmes de l'évaluation de la qualité des traductions. (A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 409 ou 410 ne peuvent obtenir de crédits pour ce cours.

FTRA 410 Révision et correction en traduction (3 crédits)

Préalables : FTRA 304. Ce cours abordera les différentes méthodes de révision et de correction de textes rédigés ou traduits en français; il sensibilisera les étudiantes et étudiants aux aspects humains et techniques du métier de réviseure et réviseur; on touchera aussi aux problèmes de l'évaluation de la qualité des traductions. (F)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 409 ou 410 ne peuvent obtenir de crédits pour ce cours.

FTRA 412 Théories de la traduction

(3 crédits)

Préalable: FTRA 301 ou 304. Ce cours est une initiation aux différentes théories actuelles de la traduction. Est examiné l'apport de secteurs disciplinaires clés tels que la linguistique, la sémiotique, la sociocritique, dans le développement de la traductologie moderne. (F/A) N.B.: Les étudiantes et étudiants qui ont suivi

TRAD 412 ne peuvent obtenir de crédits pour ce cours.

FTRA 414 Histoire de la traduction (3 crédits)

Préalable : FTRA 301 ou 304. Cours d'initiation à l'histoire de la traduction où sont traités les grands courants de la traduction depuis l'Antiquité classique. Sera également abordée la traduction dans certaines sociétés non occidentales. On procèdera par thèmes et par aires géographiques en mettant l'accent sur les époques-clés de grands changements politiques et culturels. (F/A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 414 ne peuvent obtenir de crédits pour ce cours.

FTRA 416 Informatique et traduction (3 crédits)

Préalable: FTRA 201 ou 202, et connaissance du traitement de textes. Ce cours porte sur la langue de l'informatique, la théorie et les concepts fondamentaux qui s'y rapportent. Il comporte des exercices de traduction, et une initiation aux outils informatisés pour les traducteurs: Internet, bases de données, systèmes de traduction assistée, utilitaires. (F/A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 416 ne peuvent obtenir de crédits pour ce cours.

FTRA 420 Stage de formation : de l'anglais au français (6 crédits)

Préalable: 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et tous les candidats.) (F)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 420 ne peuvent obtenir de crédits pour ce cours.

FTRA 421 Stage de formation : du français à l'anglais (6 crédits)

Préalable: 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et tous les candidats.) (A)

N.B.: Les étudiantes et étudiants qui ont suivi TRAD 421 ne peuvent obtenir de crédits pour ce cours.

FTRA 422 Stage de formation : de l'anglais au français I (3 crédits)

Préalable: 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et

FTRA 423 Stage de formation : du français à l'anglais I (3 crédits)

candidats.) (F)

Préalable : 60 crédits en traduction et autorisa-

tion de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (A)

FTRA 424 Stage de formation : de l'anglais au français II (3 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (F)

FTRA 425 Stage de formation : du français à l'anglais II (3 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (A)

FTRA 492 Tutorat en traduction (3 crédits)

Préalable: 12 crédits de traduction au niveau « 400 » et permission du département. Étude d'un sujet particulier dans le domaine de la traduction.

N.B.: Les étudiantes et étudiants qui ont suivi FRAN 492 ne peuvent obtenir de crédits pour ce cours.

FTRA 498 Étude avancée d'un sujet particulier (3 crédits)

N.B.: Les étudiantes et étudiants qui ont suivi un cours TRAD 498 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 499 Étude avancée d'un sujet particulier (6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B.: Les étudiantes et étudiants qui ont suivi un cours TRAD 499 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

31.120

EXERCISE SCIENCE

Faculty

Chair ROBERT D. KILGOUR, Associate Professor

Associate Professors LOUIS W. JANKOWSKI SHIPING MA DAVID L. PARIS WILLIAM R. SELLERS

Assistant Professor RICHARD DEMONT Lecturers ALAIN LEROUX GEORGE D. SHORT

Adjunct Professors
BARRY GAMBERG
ILKA LOWENSTEYN
RICHARD POUND
STUART ROBERTSON
KEITH MICHAEL WILKINSON

Location

Loyola Campus Drummond Auditorium, Room: DA 202 (514) 848-3327

Department Objectives

The Department of Exercise Science is committed to teaching and research in the areas of exercise, health, and physical activity while emphasising the fields of adapted physical activity and athletic therapy. The curriculum permits students to explore the biomechanical, physiological, and psychological responses to physical activity of able-bodied individuals and persons with a variety of physical impairments. Lectures and laboratories are combined with supervised involvement in community and professional activities to provide students with an education relevant to future employment, or for continuing their studies in health-related professional or graduate schools.

The Major programme provides students with the opportunity to acquire essential knowledge and a strong foundation in the field of exercise science. It offers students a concentrated series of courses that incorporates the study of behavioural and biological sciences as applied to exercise, physical activity, and health-related areas.

Where the Major provides students with the essential elements of physical activity as they relate to the healthy adult, the fundamental concept associated with Adapted Physical Activity (APA) is the adaptation of traditional exercise forms, assessment techniques, and training protocols to the needs of persons with an impairment or disability (e.g., the aged, spinal cord injured, etc.). Students entering the field of APA must have an appreciation of persons with a disability, their lifestyle, and their exercise possibilities. The form of the exercise may range from adapted leisure activities via personal exercise to competitive sport.

The Major programme is also included as the foundation to the Athletic Therapy (AT) programmes. Those active in the field of AT are devoted to the health care of physically active individuals, by utilizing various techniques in the prevention, immediate care, and rehabilitation of musculoskeletal injuries. Students (certification candidates) must fulfil the academic and practical requirements of a programme accredited by the Canadian Athletic Therapists Association (CATA) in order to be eligible to write the CATA Certification Exam. The Exercise Science Specialization programme in Athletic Therapy has been accredited by the CATA to provide the academic requirement. The scope of practice of the Certified Athletic Therapist includes musculoskeletal and postural evaluation, equipment selection and fitting, conditioning programmes, prophylactic and supportive taping, injury assessment, basic emergency life support, first aid, preparation for entrance into appropriate health-care delivery systems, rehabilitative techniques, modality therapy, and utilization of techniques facilitating a safe return to participation.

Programmes

Students are required to complete the appropriate profile for entry into the programme (see §31.002 — Programmes and Admission Requirements — Profile). Students entering the Major and Specialization programmes should refer to §16.3.10 — Academic Peformance, and §31.003.1 — WGPA Requirements. All incoming Exercise Science students enter into either the BSc Major or BSc Specialization in Exercise Science. After completing 24 credits (EXCI 201, 207, 210, 253, 257, 261, 262, and 263) with a minimum annual GPA of 2.50 in the BSc Specialization in Exercise Science, students who wish to be considered for entry into the BSc Specialization — Athletic Therapy Option and the BSc Specialization — Adapted Physical Activity Option must apply to the Department prior to

the beginning of the second year. For the BSc Specialization – Athletic Therapy Option, students must obtain a minimum GPA of 2.70 in EXCI 253, 262, and 263, as well as complete at least 50 hours of observation in the field or clinical setting during the first year of study. Students must satisfy all criteria for entry into the Athletic Therapy and Adapted Physical Activity Options before formal acceptance is granted.

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

63 BSc Specialization in Exercise Science

Stage I

- 27 EXČI 201³, 207³, 210³, 253³, 257³, 261³, 262³, 263³; INTE 296³ Stage II
- 24 EXČI 331³, 338³, 342³, 351³, 357³, 358³, 363³, 380³ Stage III
- 6 EXČI 422³, 438³
- 6 Chosen from EXCI 4523, 4553, 4583

66 BSc Specialization – Athletic Therapy Option

Stage I

- 27 EXČI 201³, 207³, 210³, 253³, 257³, 261³, 262³, 263³; INTE 296³ Stage II
- 29 EXCI 330¹, 331³, 338³, 340¹, 342³, 348³, 351³, 357³, 358³, 363³, 390³ Stage III
- 10 EXČI 430¹, 438³, 452³, 480³

63 BSc Specialization – Clinical Exercise Physiology Option

Stage I

- 27 EXČI 201³, 207³, 210³, 253³, 257³, 261³, 262³, 263³; INTE 296³ Stage II
- 24 EXČI 331³, 342³, 351³, 357³, 358³, 363³, 380³, 383³ Stage III
- 12 EXČI 422³, 455³, 458³, 483³

42 BSc Major in Exercise Science

Stage I

- 21 EXČI 201³, 207³, 253³, 257³, 261³, 262³; INTE 296³ Stage II
- 18 EXCI 331³, 342³, 351³, 357³, 358³, 363³ Stage III
- 3 Chosen from EXCI 421³, 452³, 455³, 458³

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Courses

EXCI 201 Introduction to Exercise Science (3 credits)

Prerequisite: Enrolment in an Exercise Science programme. This course provides an overview of the scientific and professional contributions that have lead to the creation of the field of exercise science. Students are introduced to the scientific foundations of the relationship between physical activity and health, and to the different areas of professional practice in exercise science. Specific emphasis is given to the areas of health and lifestyle, adapted physical activity, and athletic therapy. Lectures only.

EXCI 207 Nutrition in Exercise and Sport (3 credits)

This course provides an overview of the anatomy and physiology of the digestive system prior to examining the significance of carbohydrates, lipids, and proteins as essential nutritional requirements for physical activity and optimal performance. The importance of trace minerals and vitamins is also discussed. Specific issues such as nutrient beverages for exercise, ergogenic aids, and nutritional concerns of female athletes are some of the topics that are presented. Lectures only.

NOTE: Students who have received credit for BIOL 203 may not take this course for credit.

EXCI 210 Introduction to Adapted and Therapeutic Physical Activity

(3 credits)

Prerequisite: Enrolment in an Exercise Science programme. This course introduces students to the concept of clinical exercise physiology. It differentiates between adapted and therapeutic approaches to physical activity. The course addresses each approach with respect to its historical development, inherent principles, types of disabilities and disease conditions, demographics and epidemiological data, delivery services and the fundamentals of exercise programming ranging from activities of daily living to elite sport performance. Lectures only.

NOTE: Students who have received credit for EXCI 403 or 404 may not take this course for credit.

EXCI 218 Physical Growth and Maturation (3 credits)

This course considers normal and abnormal growth and maturation patterns of the musculo-skeletal, neural, hormonal, cardiovascular, and respiratory systems of the body. In addition, socialization and psychosocial development processes with relevance to an exercise or sports environment are examined. These

patterns and processes are investigated from childhood through adolescence and adulthood. Lectures only.

NOTE: Students who have received credit for EXCI 308 may not take this course for credit. Exercise Science students may not take this course for credit.

EXCI 221 Statistical Procedures in Exercise Science (3 credits)

Prerequisite: Enrolment in an Exercise Science programme. This course provides a description of the statistical analysis techniques most frequently employed in research in exercise science. It addresses measures of central tendency and dispersion, various correlational techniques, and fundamentals of analysis of variance. The use of computers and software for statistical applications is covered through hands-on experience. Lectures and laboratory. NOTE See §200.7

EXCl 233 Current Issues in Personal and Community Health (3 credits)

This course presents an overview of factors influencing personal and community health. Students are exposed to prevalent physical and mental health issues from biological, psychological, and sociological points of view. Health-related consequences of alcohol abuse, drugs, birth control, sedentary lifestyle, eating disorders, and communicable diseases are among the topics considered. Lectures only.

NOTE: Students who have received credit for EXCI 333 may not take this course for credit. Exercise Science students may not take this course for credit.

EXCI 251 Fundamentals of Health and Physical Activity (3 credits)

The basic and contemporary issues of health and physical activity are discussed. General topics regarding the benefits of physical activity are examined from anatomical and physiological perspectives. Lectures only.

NOTE: Exercise Science students may not take this course for credit.

EXCI 253 Human Anatomy (3 credits)
Prerequisite: Enrolment in an Exercise Science
programme. Following an introduction to
anatomical terminology, definitions, and tissues,
the course concentrates on the appendicular
and axial skeletons. The bones, articulations,
and muscles of the upper and lower extremities,
the torso, and spine are studied in depth. The
circulatory and peripheral nervous systems of
these areas are also presented to better
understand the complete regional relationships
for subsequent study in core courses in
Exercise Science. Lectures and laboratory.

EXCI 257 Human Physiology I: The Neuromuscular and Endocrine Systems (3 credits)

Prerequisite: EXCI 253. This course surveys the

structural and functional organization and integration of the major systems of the body. A strong emphasis is placed on the fundamental control and operation of the nervous systems, the mechanisms and energetics of skeletal muscle function, and the actions of hormones that comprise the endocrine and reproductive systems. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 353 may not take this course for credit.

EXCI 261 Physical Activity Programming for Health and Performance (3 credits)

Prerequisite: EXCI 201 previously or concurrently. This course addresses the scientific principles of physical activity as they apply to the health status, physical fitness, exercise patterns, and effectiveness of exercise prescription relative to the lifestyle of students enrolled in the course. Topics addressed include programming for cardio-respiratory endurance, body composition and weight control, muscle strength and endurance, flexibility, agility, coordination, balance, speed, and power. Lectures and laboratory.

EXCI 262 Emergency Care in Exercise and Sport Injuries (3 credits)

Prerequisite: EXCI 253 previously or concurrently. This course identifies common injuries and acute pathological conditions associated with physical activity. Students learn to recognize the injury and perform subsequent emergency or initial treatment. The "how" and "why" of emergency treatment are covered. Lectures and laboratory.

NOTE: The Association Québécoise des Thérapeutes du Sport (AQTS) accepts successful completion of this course as equivalent to a first aid course which is a partial requirement towards provincial recognition as a Level I Sport First Aider.

EXCI 263 Principles of Athletic Therapy (3 credits)

Prerequisite: EXCl 262. The course considers topics in athletic therapy from professional, preventive, and pathological perspectives. The course deals with injury classification, clinical flexibility, strength testing, cryotherapy, and sports dermatology. Preventive techniques such as pre-season physical examinations, protective equipment, hazard recognition, and taping techniques are also addressed. Acute and chronic pathologies associated with physical activity, as well as issues including sudden death and communicable diseases in athletics, and the adolescent athlete will be discussed. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 335 may not take this course for credit.

EXCI 275 The Principles, Strategies and Styles of Leadership (3 credits)

This course examines the art of leadership and

234 . EXERCISE SCIENCE

the science of management through lectures, workshops, and practical laboratory settings. Using fundamental theories, principles and concepts, this course will assist the student in the development of specific skills and strategies in acquiring an understanding of the various leadership styles. The format for this development will be accomplished using group activities, initiation tasks, simulations, and case studies. Lectures and laboratory. NOTE: Students who have received credit for

NOTE: Students who have received credit for EXCI 270 or 370 may not take this course for credit.

EXCI 298 Selected Topics in Exercise Science (3 credits)

EXCI 299 Selected Topics in Exercise Science (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EXCI 330 Assessment and Rehabilitation Laboratory I (1 credit)

Prerequisite: EXCI 263, 338 previously or concurrently, enrolment in the Exercise Science Specialization – Athletic Therapy Option. This is a practical laboratory course in assessment and rehabilitation with specific concentration on the extremities. The student will receive hands-on exposure to tests for active and passive joint ranges of motion, muscle strength, and neurological deficits. Special tests to help identify various pathologies will be introduced. History taking and palpatory skills will also be presented. This laboratory course will emphasize assessment, treatment decisions, and guidelines for progression of therapy of the upper and lower extremities. Laboratory only.

NOTE: Students who have received credit for EXCI 336 may not take this course for credit.

EXCI 331 Lifestyle Behaviour and Health (3 credits)

Prerequisite: EXCI 201, 261; INTE 296. This course examines the relationship between lifestyle behaviours and physical/mental health. Smoking, diet, eating behaviours, alcohol, drug abuse, exercise, sexual behaviours, and stress/anger/hostility are addressed from four perspectives: prevalence of different lifestyle behaviours in the population, effects of lifestyle behaviour on physical/mental health, methods for changing lifestyle behaviour, and effectiveness of lifestyle behaviour change programmes. Lectures only. NOTE: EXCI students may take EXCI 233 or 331, but not both.

EXCI 338 Assessment and Rehabilitation I: The Extremities (3 credits)

Prerequisite: EXCI 263 and acceptance into the Exercise Science Specialization. This course examines clinical assessment and rehabilitation protocols. Topics include assessment of medical status, evaluation protocols, tissue healing, and

postural asymmetries. Applied anatomy, assessment, and surgical procedures of orthopaedic injuries to upper and lower extremities, and concomitant rehabilitation programmes are presented. Lectures only. NOTE: Students who have received credit for EXCI 336 may not take this course for credit.

EXCI 340 Therapeutic Modalities in Sports Medicine Laboratory

(1 credit)

Prerequisite: EXCI 348 previously or concurrently. This is a practical laboratory course in therapeutic modalities which are used in the sports medicine clinic or athletic training room. After review of body physiological responses to trauma, instructions will relate to how each modality will affect the injury response process. The student will be introduced to each modality's instrumentation, learn how to set it up prior to treatment, and practice application for various pathologies. An introduction to manual therapies such as mobilization and massage will be presented. Indications, contraindications, and precautions for all treatment protocols will be given. Laboratory only.

NOTE: Students who have received credit for EXCI 448 may not take this course for credit.

EXCI 342 Physical Fitness Assessment and Exercise Intervention (3 credits)

Prerequisite: EXCI 261; INTE 296. This course introduces students to assessment methodologies and techniques employed for clearance for exercise stress testing, fitness class participation, and exercise prescription. Health components of fitness addressed include body composition, muscular strength and endurance, cardio-respiratory abilities, performance components of agility, balance, coordination, speed, power, and reaction time. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 398D may not take this course for credit.

EXCI 348 Therapeutic Modalities in Sports Medicine (3 credits)

Prerequisite: EXCI 338 and enrolment in the Exercise Science Specialization – Athletic Therapy Option. The student will be introduced to the parameters of therapeutic electrical currents and their physiological effects. Various modalities such as heat, cold, ultrasound, muscle stimulation, interferential currents, T.E.N.S., and therapeutic massage are examined. Mobilization techniques and acupuncture principles are introduced. Indications and contraindications for all treatments are presented. Lectures only. NOTE: Students who have received credit for EXCI 448 or 498C may not take this course for credit.

EXCI 351 Introduction to the Biomechanics of Human Movement (3 credits)

Prerequisite: EXCI 253. The primary focus of this course concentrates on the mechanical

principles and the neural control mechanisms pertinent to an understanding of human movement. Fundamental principles of kinematics and kinetics are examined in a theoretical and practical context. Practical applications related to sport injuries and rehabilitation are to be discussed. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 451 may not take this course for credit.

EXCl 357 Human Physiology II: The Cardiovascular and

Respiratory Systems (3 credits) Prerequisite: EXCI 257. This course deals with the structural, the fundamental mechanisms and the functional control of the cardiovascular and respiratory systems. A detailed analysis of the rhythmical control of the heart, cardiovascular hemodynamics, capillary and coronary circulations, control of arterial blood pressure, the regulation of heart rate, cardiac output, and the peripheral vasculature is discussed. With respect to respiratory physiology, selected topics including pulmonary mechanics, principles of gas exchange and diffusion, transport of oxygen and carbon dioxide in the blood, and the regulation of respiration are addressed. Lectures and laboratory.

EXCI 358 Physiology of Exercise (3 credits)

Prerequisite: EXCI 357. This course deals with the physiological adjustments and adaptations to physical activity. Special emphasis is placed on examining the functional capacity of the cardiovascular, respiratory, neuromuscular, and endocrine systems to acute exercise and the process of adaptation to exercise training. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 456 may not take this course for credit.

EXCI 363 Social Psychological Aspects of Exercise and Physical Activity (3 credits)

Prerequisite: EXCI 201, 261; INTE 296. This course provides an overview of the scientific research and practical applications emerging from the subfield of exercise psychology. Topics covered include the psychological outcomes of exercise and physical activity (e.g. decreased depression and anxiety, increased self-efficacy and self-esteem, enhanced quality of life) and the problems of adherence and compliance to a physically active lifestyle in different target populations ranging from normal populations to persons with disabilities. Special attention is also given to predictors and consequences of athletic injuries including psychology of pain. Lectures and tutorials.

EXCI 380 Adapted Physical Activity (3 credits)

Prerequisite: EXCI 210 and acceptance into the Exercise Science Specialization or Exercise Science Specialization – Adapted Physical

Activity Option. This course examines the pathology associated with selected physical impairments and disabilities including sensorial, neurological, and orthopaedic conditions. Appropriate adapted physical activities are presented together with contraindications to physical activity and the role of environmental factors. Lectures and laboratory. NOTE: Students who have received credit for EXCI 403 or 404 may not take this course for credit.

EXCI 383 Adapted Physical Activity Internship I (3 credits)

Prerequisite: Acceptance into the Exercise Science Specialization – Adapted Physical Activity Option. This course offers students the opportunity to observe and participate in physical activity programming offered for special populations (i.e. persons with neurological and physical impairments) under a supervised setting. This course involves a commitment of 120 hours including a weekly seminar.

EXCI 390 Athletic Therapy Internship I (3 credits)

Prerequisite: Concurrent with EXCI 338 and acceptance into the Exercise Science Specialization – Athletic Therapy Option. Students must be certification candidates of the Canadian Athletic Therapists Association and the Québec Association of Athletic Therapists. This course offers students the opportunity to work in an emergency or preventive setting with a sports team, although some clinical component may be introduced. This course involves a commitment of 120 hours including a weekly seminar. NOTE: Students who have received credit for EXCI 398I may not take this course for credit.

EXCI 398 Selected Topics in Exercise Science (3 credits)

EXCI 399 Selected Topics in Exercise Science (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EXCI 421 Fitness and Sport Management (3 credits)

Prerequisite: Completion of 30 university credits. The course considers the administration and management of fitness and sport organizations, and athletic facilities. Concepts include event planning, financial management, legal aspects, public relations, fundraising and marketing techniques, and sport licensing. Lectures only.

EXCI 422 Therapeutic Physical Activity (3 credits)

Prerequisite: EXCI 358, 380. This course examines the pathology associated with various metabolic, cardiovascular, respiratory, and immunological impairments, and discusses the

role of adapted physical activity in the treatment and resolution of these conditions, and the individuals' health status. Lectures and seminars.

NOTE: Students who have received credit for EXCI 404 may not take this course for credit.

EXCI 430 Assessment and Rehabilitation Laboratory II (1 credit)

Prerequisite: EXCI 330, 338, and 438 previously or concurrently. This is a practical laboratory course in assessment and rehabilitation with specific concentration on the spine and pelvis. Students receive hands-on exposure to tests for active and passive joint ranges of motion, muscle strength, and neurological deficits. Special tests to help identify various pathologies are introduced. History taking and palpatory skills are also presented. This laboratory course emphasizes assessment, treatment decisions, and guidelines for progression of therapy of the spine and pelvis. Laboratory only.

NOTE: Students who have received credit for EXCI 339 may not take this course for credit.

EXCI 438 Assessment and Rehabilitation II: Spine and Pelvis (3 credits)

Prerequisite: EXCI 338. This course examines clinical assessment and rehabilitation protocols. Topics include chart recording, proprioception, open and closed kinetic chains, and gait analysis. Applied anatomy, assessment, and surgical procedures of orthopaedic injuries to the temporomandibular joint, cervical, thoracic and lumbar spine, and to the pelvis are examined. Concomitant rehabilitation programmes are presented. Lectures only. NOTE: Students who have received credit for EXCI 336 or 339 may not take this course for credit.

EXCI 452 Essentials of Strength Training and Conditioning (3 credits)

Prerequisite: EXCI 358. This course utilizes the students' background knowledge of anatomy, physiology, biomechanics, exercise physiology, and exercise programming to design pre-season, in-season, and post-season conditioning programmes for elite athletes in a variety of sports. Specific issues include training methods and models, exercise selection and order, load assignents, training volumes, and frequency of participation. Lectures only.

NOTE: Students who have received credit for EXCI 498S may not take this course for credit.

EXCI 455 Physical Activity, Health and Aging (3 credits)

Prerequisite: EXCI 358. This course addresses the health status, physical fitness, exercise patterns, and effectiveness of exercise prescription for the well elderly and those exhibiting symptoms of chronic diseases which commonly accompany the aging process. Lectures and laboratory.

EXCI 458 Pediatric Exercise Science (3 credits)

Prerequisite: EXCI 351, 358, 363. This course introduces students to the anatomical, physiological, and psychosocial issues related to exercise and physical activity in children. Topics include influence on growth and health, injury potential, endurance exercise, weight training, youth in sport, competitive and collaborative play, stress in childhood, and the strategies for improving exercise habits of children. Lectures only.

EXCI 480 Athletic Therapy Internship II (3 credits)

Prerequisite: EXCI 348, 358, 390. Students must be certification candidates of the Canadian Athletic Therapists Association and the Québec Association of Athletic Therapists. The course offers a supervised period of work in a rehabilitation or athletic therapy clinic and/or in an emergency or preventive setting with a sports team. The course involves a commitment of 120 hours including a weekly seminar.

NOTE: Students who have received credit for

NOTE: Students who have received credit for EXCI 460 or 499A may not take this course for credit.

EXCI 483 Adapted Physical Activity Internship II (3 credits)

Prerequisite: EXCI 358, 383. The course offers a supervised period of work as activity leader or exercise technician in a hospital or rehabilitation centre or similar institution; or as a technician assisting in physiological evaluation or a related position. The course involves a commitment of 120 hours including a weekly seminar. NOTE: Students who have received credit for EXCI 463 or 499B may not take this course for credit.

EXCI 492 Independent Study in Exercise Science (3 credits)

Prerequisite: Completion of 60 credits in the Exercise Science Major or Specialization Programmes and written permission of the Department Chair. This course provides an opportunity to conduct a small-scale scientific research project under the supervision of a faculty member from the Department. In consultation with a faculty member, the student selects a topic, formulates a research methodology, collects data, analyses the results, and writes a formal research report. NOTE: Students who have received credit for EXCI 491 may not take this course for credit.

EXCI 498 Advanced Topics in Exercise Science (3 credits)

EXCI 499 Advanced Topics in Exercise Science (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.130

GEOGRAPHY

Faculty

Chair PATRICIA A. THORNTON

Professors S. ROBERT AIKEN DAVID B. FROST BRIAN SLACK

Associate Professors
JACQUELINE M. ANDERSON
I. MAX BARLOW
DAVID F. GREENE

ALAN E. NASH JOHN ZACHARIAS

Assistant Professors
PASCALE BIRON
MONICA MULRENNAN

Adjunct Professors CLAUDE COMPTOIS MICHAEL MARSDEN ANDRÉ ROY

Location

Sir George Williams Campus J.W. McConnell Building, Room: LB 641 (514) 848-2050

Department Objectives

Geography focuses on the Earth as the home of humans. Of central concern is the study of the physical and biological processes that operate in the natural world and the human processes that create landscapes and places. Geography explores the complexity of and the relations between cultural and natural systems, examines the ongoing radical transformation of the Earth and space by human action, and focuses on the meaning that people attach to space, place and landscape. In addition to learning a variety of technical skills (for example, cartography, statistical methods, and computer-based geographic information systems), students acquire a better understanding of the world (local, regional and global) and the place of humans in it.

Programmes

BSc Programmes

Students are required to complete the appropriate entrance profile for entry into the programme (see §31.002 — Programmes and Admission Requirements — Profiles).

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

60 BA Honours in the Human Environment

Stage I

- 12 GEOG 220³, 260³, 270³, 290³
- 3 Chosen from GEOG 210³; GEOL 210³; URBS 230³ Stage II
- 12 GEOG 300³, 360⁶, 363³
- 6 Chosen from GEOG 317³, 330³, 355³
- 6 Chosen from GEOG 374³, 375³, 376³, 377³, 378³
- 3 300-level Geography or cognate courses chosen with the approval of the Geography adviser Stage III
- 12 Elective credits in Geography at the 400 level
- 6 GEOG 491⁶

60 BA Specialization in the Human Environment

Stage I

- 12 GEOG 220³, 260³, 270³, 290³
- 3 Chosen from GEOG 210³; GEOL 210³; URBS 230³

- Stage II
- 12 GEOG 300³, 360⁶, 363³
- 6 Chosen from GEOG 317³, 330³, 355³
- 6 Chosen from GEOG 374³, 375³, 376³, 377³, 378³
- 3 300-level Geography or cognate courses chosen with the approval of the Geography adviser Stage III
- 12 Elective credits in Geography at the 400 level
- 6 Elective credits in Geography at the 300 or 400 level

42 BA Major in the Human Environment Stage I

- 2 GEOG 220³, 260³, 270³, 290³
- 3 Chosen from GEOG 210³; GEOL 210³; URBS 230³ Stage II
- 12 GEOG 300³, 360⁶, 363³
- 3 Chosen from GEOG 317³, 330³, 355³
- 3 Chosen from GEOG 374³, 375³, 376³, 377³, 378³

Stage III

9 Elective credits in Geography at the 300 or 400 level. At least six credits must be at the 400 level.

69 BSc Honours in Environmental Geography

Stage I

- 12 GEOG 220³, 260³, 270³, 290³
- 3 GEOL 210³
- 6 Chosen from BIOL 225³, 226³, 227³; GEOL 213³; PHYS 273³ Stage II
- 12 GEOG 300³, 360⁶, 363³
- 12 Chosen from GEOG 374³, 375³, 376³, 377³, 378³ (Students may choose three credits from GEOG 355³, 366³.) Stage III
- 18 Made up from the following groups: At least 6 chosen from GEOG 470³, 472³, 474³ No more than 6 chosen from BIOL 351³, 353³, 354³, 450³, 457³, 458³, 459³; GEOL 302³, 324³, 440³ No more than 12 chosen from GEOG 403³, 406³, 458³, 463³, 473³, 498³*
- 6 GEOG 491⁶

*Where the subject matter is of a natural science nature.

NOTE: 48 credits in the programme must be approved science credits.

69 BSc Specialization in Environmental Geography

Stage I

- 12 GEŎG 220³, 260³, 270³, 290³
- 3 GEOL 210³
- 6 Chosen from BIOL 225³, 226³, 227³; GEOL 213³; PHYS 273³ Stage II
- 12 GEOG 300³, 360⁶, 363³
- 12 Chosen from GEOG 374³, 375³, 376³, 377³, 378³ (Students may choose three credits from GEOG 355³, 366³.)

Stage III

24 Made up from the following groups: At least 6 chosen from GEOG 470³, 472³, 474³ No more than 6 chosen from BIOL 351³, 353³, 354³, 450³, 457³, 458³, 459³; GEOL 302³, 324³, 440³ No more than 18 chosen from GEOG 403³, 406³, 458³, 463³, 473³, 498³*

*Where the subject matter is of a natural science nature.

NOTE: 48 credits in the programme must be approved science credits.

42 BSc Major in Environmental Geography

Stage I

- 12 GEOG 220³, 260³, 270³, 290³
- 3 GEOL 210³
- 3 Chosen from BIOL 225³, 226³, 227³; GEOL 213³; PHYS 273³ Stage II
- 12 GEOG 300³, 360⁶, 363³
- 12 300- or 400-level Geography elective credits chosen with the approval of the Geography adviser. At least three credits must be at the 400 level.

30 Minor in the Human Environment

- 15 GEOG 220³, 260³, 270³, 290³, 300³
- 15 GEOG elective credits at the 300 or 400 level

24 Minor in Environmental Geography

- 6 GEOG 270³, 290³
- 3 GEOL 210³
- Chosen from GEOG 300³, 363³, 374³, 375³, 376³, 377³, 378³
 Chosen from GEOG 406³, 458³, 463³,
- 6 Chosen from GEOG 406³, 458³, 463³, 470³, 472³, 474³

NOTE: This Minor is intended for Science students.

Students in programmes leading to the BSc degree may take the courses in Geography listed below for credits to be applied to their programme of concentration.

GEOG 260	Mapping and the Environment (3 credits)
GEOG 270	The Natural Environment (3 credits)
GEOG 360	Research Methods (6 credits)
GEOG 363	Geographic Information Systems (3 credits)
GEOG 366	Cartographic Visualization (3 credits)
GEOG 374	Plant Ecology (3 credits)
GEOG 375	Hydrology (3 credits)
GEOG 376	Biogeography (3 credits)
GEOG 377	Landform Evolution (3 credits)
GEOG 378	The Climate System (3 credits)
GEOG 458	Environmental Impact Assessment (3 credits)
GEOG 463	Advanced Geographic Information Systems (3 credits)
GEOG 470	Environmental Management (3 credits)
GEOG 472	Environmental Change during the Quaternary (3 credits)
GEOG 473	Environment and Health (3 credits)
GEOG 474	Forest Management (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

GEOG 200 World Geography (3 credits)

This course provides an overview of world geography. It first examines the main environmental and social factors that geographers have employed to divide the world into a series of distinctive regions, and uses examples of specific countries to explore the distinctive geographical processes by which these patterns are transformed and perpetuated.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 203 (also listed as SCHA 203) Canadian Environmental Issues (3 credits)

This course explores a number of contemporary and controversial environmental issues in Canada. It provides a general overview of the policy context of environmental decision-making, focusing in particular on the involvement of aboriginal groups in natural resource management and the role of various levels of government, non-government organizations, the news media and the international community in shaping Canadian environmental policies. Issues explored in the course include national parks, animal rights, fisheries management, and northern development and environmental impact assessment. NOTE: Students who have received credit for SCHA 203, 254, or for this topic under a GEOG 298 number may not take this course for credit.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 204 (also listed as SCHA 204) Global Environmental Issues (3 credits)

This course examines a number of global environmental issues from an interdisciplinary perspective. The complex interactions and interdependencies among the biophysical, socio-economic, political, and cultural aspects of global environmental change are explored in relation to issues such as global warming, desertification, deforestation, declining biodiversity, and acid rain. NOTE: Students who have received credit for SCHA 204, 253, or for this topic under a GEOG 298 number may not take this course for credit.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 206 *Maps and Mapping* (3 credits) This course explores the role of maps in society. Students are introduced to basic mapping concepts in order to evaluate the meaning and use of various types of maps. Samples of the following types of maps are studied: historic maps, political maps, cognitive maps, maps in

newspapers and magazines, computer-generated maps, and maps on television.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 209 The Geography of a Selected Region (3 credits)

The course includes both a systematic survey as well as an in-depth focus on particular geographical issues and problems. The specific region to be studied may vary from year to year.

GEOG 210 Geography of Global Change (3 credits)

This course examines a variety of geographical changes related to globalization. It focuses mainly on the global political system and the global economy, and also considers transport and communications systems, culture, and environmental issues.

NOTE: Students who have received credit for GEOG 201 or 300 may not take this course for credit.

GEOG 220 The Human Environment: Place, Space, and Identity (3 credits)

This course introduces the concepts of "place", "space", and "identity". These concepts were developed by geographers to investigate economic, social, and especially cultural factors which influence the ways we construct and understand our environments. It examines how we construct the meaning of place, the unique identity of places, the contests over identity of place, and claims to rights over place. How these have been affected by migration and globalization are then examined within the context of an already constituted social and geographical unevenness (political, economic, environmental, and cultural).

NOTE: Students who have received credit for GEOG 211 may not take this course for credit.

GEOG 260 Mapping the Environment (3 credits)

This course introduces students to the basic concepts, theory, and methods of mapping with reference to topographic and thematic maps. Through lectures, laboratories, and practical assignments, students learn about the sources of data for maps, and how these data are manipulated, represented, and interpreted in both analogue and digital form (Geographic Information Systems).

NOTE: Students who have received credit for GEOG 267 may not take this course for credit.

GEOG 270 The Natural Environment (3 credits)

This course introduces the Earth's biophysical

environment: the atmosphere, the hydrosphere, the lithosphere, and the biosphere. A systems approach allows for the examination of the structural components of this environment and the processes operating within it. Topics include energy flow; wind, weather, and climate; the hydrological cycle; soils and soil formation; biogeochemical cycling; biotic interactions; and terrestrial biomes.

NOTE: Students who have received credit for GEOG 271, 275, or 276 may not take this course for credit.

GEOG 290 The Geographer's World: An Integrated Approach to Land, People, and Society (3 credits)

Prerequisite: GEOG 220, 270. This course integrates human and physical geography into a holistic view of human-environment relations. It focuses on a few key environmental issues through case studies operating at a variety of scales (global, national, regional, local), and in different places and time periods. It examines how humans interact with the environment; how they, as members of societies and bearers of culture, perceive, use, transform, and manage the physical environment in different ways and are in turn impacted by changes to that environment. Each case study highlights a specific method and tool of geographic analysis and introduces students to the value of different approaches to environmental issues. NOTE: Students who have received credit for GEOG 211, 271, 275, or 276 may not take this course for credit.

GEOG 298 Selected Topics in Geography (3 credits)

GEOG 299 Selected Topics in Geography (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Geography Course Guide.

GEOG 300 Environment: Historical and Cultural Perspectives (3 credits)

Prerequisite: GEOG 290 or permission of the Department. This course explores selected aspects of nature and culture in Western thought. It focuses on four overlapping themes: (1) it presents a broad historical overview of the questions that humans have posed concerning the habitable earth and their relationships to it; (2) it looks in more detail at one of those questions, namely, the extent to which human agency has transformed the earth; (3) it explores the relations between attitudes, values and behaviour, focusing mainly on the idea of wilderness; and (4) it traces the roots and describes the main characteristics of contemporary environmentalism. NOTE: Students who have received credit for GEOG 303, 304, or 305 may not take this course for credit.

GEOG 317 Population Geography (3 credits)

Prerequisite: GEOG 220 or permission of the Department. This course offers a broad introduction to the characteristics and processes of population change. It focuses on techniques of population analysis and is primarily concerned with issues and problems at the national and global scale. It is framed within the theoretical context of the demographic and mobility transitions. The content reflects the growing focus on policy formation and exposes students to widely available tools (software) for "hands-on" and up-to-date analysis of real demographic situations and scenarios.

GEOG 330 *Urban Geography* (3 credits) Prerequisite: GEOG 220 or permission of the Department. The geographer's view of the city is explored at two scales: cities as elements of an urban system, including topics such as urbanization and the functional structure of cities; and intra-urban patterns, including the spatial arrangement of land-use and social areas. *NOTE: Students who have received credit for GEOG 331 may not take this course for credit.*

GEOG 333 Urban Transportation (3 credits)

Prerequisite: URBS 230 or permission of the Department. This course examines the function of various transport modes in the city. Both practical and policy issues are covered. Methods of transportation planning are presented through practical assignments based on fieldwork in Montréal. Policy options are considered in light of theoretical and empirical evidence drawn from geographical research.

GEOG 342 The Making of the Irish Landscape (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course focuses on the evolution of the Irish landscape and examines the physical, political, social, economic and attitudinal processes that have shaped the cultural landscape from prehistoric times to the present.

NOTE: Students who have received credit for this topic under a GEOG 398 number may not take this course for credit.

GEOG 355 Resource Analysis and Management (3 credits)

Prerequisite: GEOG 290 or permission of the Department. The course is concerned with the use of the Earth's natural resources and with the economic, institutional, and ecological factors that affect, condition, and control the use of these resources. It examines various approaches to analysing, evaluating, and resolving resource issues and conflicts. These approaches are applied to Canadian forestry, fisheries, water, energy, and mineral resources.

GEOG 360 Research Methods (6 credits) Prerequisite: GEOG 260, 290; or permission of the Department. This two-semester course

focuses on research design, research methods, and quantitative data gathering and analysis. There is an emphasis on field techniques (three weekends in the field). The resulting data sets form the material for the introduction of statistical analyses (t-tests, regression, ANOVA, and non-parametric tests) and the writing of research papers and critical reviews.

NOTE: Students who have received credit for GEOG 361 or 362 may not take this course for credit.

GEOG 363 Geographic Information Systems (3 credits)

Prerequisite: GEOG 260, 290; or permission of the Department. This course is an introduction to the nature, role, and value of Geographic Information Systems (GIS). Through lectures and practical assignments students examine the data requirements (sources and structure) and hardware and software requirements of GIS as well as ways of using GIS for spatial analysis and modelling. Concepts are applied in the laboratory using IDRISI.

NOTE: Students who have received credit for this topic under a GEOG 398 number may not take this course for credit.

GEOG 366 Cartographic Visualization (3 credits)

Prerequisite: GEOG 260 and permission of the Department. This course explores the map as a means of spatial representation. It examines theoretical issues concerning how maps work, with particular emphasis on map symbolization. The design and production of computer-assisted maps form an important part of the course.

GEOG 374 Plant Ecology (3 credits) Prerequisite: GEOG 270 or permission of the Department. This course examines plant community dynamics as a consequence of the population dynamics of the constituent plant species. The role of natural disturbances is stressed, particularly as it relates to forests. Concepts are applied to problems in park management, vegetation mapping, and present controversies about the maintenance of species diversity.

GEOG 375 Hydrology (3 credits)

Prerequisite: GEOG 270 or permission of the Department. The course introduces students to water as an agent of transformation of the land-scape. It is based on the use of fundamental concepts from the analysis of systems and from process studies. The course aims at understanding the mechanics of processes governing the motion of water on hillslopes and in rivers. Theoretical concepts are presented in a lecture format, while the analysis of hydrological data through practical assignment provides an appreciation of the real-world manifestation of these concepts.

NOTE: Students who have received credit for GEOG 475 or 476 may not take this course for credit

GEOG 376 *Biogeography* (3 credits) Prerequisite: GEOG 270 or permission of the Department. This course examines the spatial distribution of animals and plants at large scales and over long periods. Topics include vegetation distribution in relation to climate, island biogeography, long-distance dispersal, diversity gradients, mass extinctions, speciation, and taxonomic distribution in relation to plate drifting. This course involves field trips.

NOTE: Students who have received credit for GEOG 371 may not take this course for credit.

GEOG 377 Landform Evolution (3 credits) Prerequisite: GEOG 270 or permission of the Department. This course examines the processes responsible for the development and evolution of the Earth's landforms, including human modifications to those landforms. Topics include the study of fluvial, coastal, glacial, periglacial, and arid landforms.

NOTE: Students who have received credit for GEOG 372 may not take this course for credit.

GEOG 378 The Climate System (3 credits) Prerequisite: GEOG 270 or permission of the Department. This course compares the climate systems of the tropics and the mid-latitudes; examines the differing climate systems over oceans, deserts, grasslands, forests, and frozen surfaces; and explores the acquisition of climate data from traditional instruments, automated weather stations, and the Internet. It concludes with a brief discussion of climate modelling. Students are responsible for taking observations at the Department's weather station.

NOTE: Students who have received credit for GEOG 373 may not take this course for credit.

GEOG 398 Selected Topics in Geography (3 credits)

GEOG 399 Selected Topics in Geography (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

GEOG 403 Sustainable Development (3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course deals with selected aspects of the relations between humans and the environment in the contemporary world. It focuses specifically on the concept of sustainable development and deals mainly with problems and issues at the global scale.

NOTE: Students who have received credit for GEOG 405 may not take this course for credit.

GEOG 406 The Tropical Rain Forest (3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course focuses on three

themes: how tropical forest ecosystems function and change; the causes and consequences of deforestation and forest alteration; and forest values and the need for conservation.

NOTE: Students who have received credit for GEOG 306 or for this topic under a GEOG 398 or 498 number may not take this course for credit.

GEOG 407 Indigenous Resource Management (3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course explores the relationship between indigenous peoples and the environment. It focuses on two primary themes: first, it looks at ways in which ecological knowledge shapes indigenous resource management, land tenure, and sea-rights systems; and second, it examines the roles of indigenous peoples and state authorities in land, sea, and resource management.

NOTE: Students who have received credit for GEOG 304 or for this topic under a GEOG 498 number may not take this course for credit.

GEOG 417 Population and the Environment (3 credits)

Prerequisite: GEOG 317 or permission of the Department. This course examines the processes by which population and environmental phenomena interact, and looks at the effects of those processes through a series of case studies and thematic issues. It concludes with a discussion of theoretical approaches to the relationship between populations, resources and environment, as well as theory currently advanced by policy makers to inform response to population-environment problems.

GEOG 430 Cities and Their Governance (3 credits)

Prerequisite: 60 credits or permission of the Department. The course examines government structures and administrative arrangement in large cities and focuses on developments occurring over the last fifty years, with an emphasis on the effects and implications of recent restructuring of local government. Current major challenges for urban local government are considered, relating to the role of local government in economic development and in working towards sustainable cities. The perspective is primarily geographical, but the course is intended to interest students in several social sciences. NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 438 *Urban Ecology* (3 credits)
Prerequisite: GEOG 330 or permission of the
Department. The city is viewed as an interdependent and interactive system. The issues
surrounding ecological, economic, and sociocultural sustainability are examined in the context of the development of public policy. The
integration of a spectrum of ecological

approaches and standards is a major theme in individual research projects undertaken in this course

NOTE: Students who have received credit for URBS 438 or 488 may not take this course for credit.

GEOG 440 Geography and Public Policy (3 credits)

Prerequisite: 33 credits in Geography or permission of the Department. This course examines the relationship between geographical approaches to problems and issues, and the public policy process. It discusses such topics as the relevance of geographical information and geographical research to policy makers, the need for assessment of the spatial and environmental impact of public policies, and the role of geographers in the public policy process.

GEOG 458 Environmental Impact Assessment (3 credits)

Prerequisite: GEOG 355 or permission of the Department. This course examines the conceptual bases, procedures, and methodology of Environmental Impact Assessment (EIA). The effectiveness of EIA as a decision-making process in the promotion of good environmental planning is analysed, including its role in assessing the potential effects of certain activities on the natural environment as well as on social, cultural, and economic aspects of the environment.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 463 Advanced Geographic Information Systems (3 credits)

Prerequisite: GEOG 360, 363; or permission of the Department. This course in Geographic Information Systems (GIS) focuses on database structure and management as well as advanced spatial analysis techniques. It considers both practical and theoretical questions of interpretation of GIS in the context of particular problems and real data sets. The course involves hands-on use of both raster- and vector-based software in a laboratory setting.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 470 Environmental Management (3 credits)

Prerequisite: GEOG 377 or permission of the Department. This course applies fundamental principles concerning the biophysical environment to the development of strategies and policies for managing the environment. It takes a case-study approach to the management of coastal and fluvial environments. Topics covered include strategies and policies involved in sea defence, beach protection, integrated coastal zone management, flood alleviation, river stabilization, and river restoration schemes.

GEOG 472 Environmental Change during the Quaternary (3 credits)

Prerequisite: Six credits of physical geography at the 300 level or permission of the Department. This course examines environmental change over the last three million years to show how the biophysical environment and the landscape of the Earth have changed during the time that humans have lived on the planet. Theories covered include climate and sea-level changes as well as changes in vegetation associations, sea-ice cover, and numbers of mammals. Particular attention is paid to the degree and frequency of change and techniques of assessing environmental change.

NOTE: Students who have received credit for

NOTE: Students who have received credit for GEOG 372 or this topic under a GEOG 498 number may not take this course for credit.

GEOG 473 Environment and Health (3 credits)

Prerequisite: GEOG 317, 378; or permission of the Department. This course combines aspects of applied climatology and medical geography to examine the association of climate and other environmental factors with disease or morbidity. It also highlights techniques and problems of measuring and evaluating areal associations among phenomena.

GEOG 474 Forest Management (3 credits) Prerequisite: GEOG 374 or permission of the Department. This course looks at changes in the exploitation and management of the forest resource in Canada. Topics include the history of cutting strategies and their effect on species composition; the effects of technological changes in harvesting, transportation and milling on forests; and the evolution of modern forest management philosophies and approaches.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not

take this course for credit.

GEOG 490 Internship in Geography (3 credits)

Prerequisite: Permission of the Department. This course provides final-year students the opportunity to apply their geographical skills and training in a workplace environment. In consultation with the supervisor, students identify a placement related to their interests, develop and carry out a project approved by both employer and academic supervisor, and/or keep a daily log of how the tasks and duties performed relate to and build upon their academic studies. The internship involves 120 hours of unpaid work and contribution to a seminar series.

GEOG 491 (also listed as URBS 491) Honours Essay (6 credits)

Prerequisite: Permission of the Department. The course requires the student to propose and conduct a research project and to produce a substantial report under the supervision of a faculty adviser.

GEOG 498 Advanced Topics in Geography (3 credits)

GEOG 499 Advanced Topics in Geography (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

31.140

GEOLOGY

Faculty

Associate Professor
JUDITH PATTERSON

Adjunct Professors JOHN T. JENKINS STEPHEN KUMARAPELI KALYAN K. MUKHERJI Adjunct Assistant Professors COLLEEN ELLIOTT KAREN ST. SEYMOUR

Location

Loyola Campus

Drummond Science, Room: DS 206

Sir George Williams Campus J.W. McConnell Building, Room: LB 641 (514) 848-2050

Department Objectives

Geology is about the Earth and how natural processes change and shape the environment. It acknowledges the influence of industrial and human activity on this planet.

Programmes

Currently admissions have been suspended into the BSc Major and Minor in Geology, but a variety of courses in Geology are nevertheless offered. Those numbered between 200 and 209 are designed as service courses for non-science students. Those numbered 210 and higher are designed as complementary courses for students in other Science programmes.

39 BSc Major in Geology*

Stage I

- 18 GEOL 210³, 211³, 213³, 216³, 231³, 302³ Stages II & III
- 15 GEOL 311⁶, 331³, 332³, 415³
- 6 Chosen from GEOL 232³ and Geology 300- and 400-level courses
- 24 Minor in Geology*
- 12 GEOL 210³, 211³, 213³, 302³
- 12 GEOL elective credits

NOTE: GEOL 203³, 205³, 206³, 208³ cover topics of general interest in Earth sciences and may be taken by students without a strong background in science.

Students without cégep Geology 901 or equivalent are required to take GEOL 210³.

Field Trips

Field trips, normally conducted on Fridays or weekends, are mandatory in some Geology courses.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

GEOL 203 Introduction to Environmental Geology (3 credits)

Prerequisite: None; GEOL 210 recommended. Geology in the ecosystem. The Earth's atmosphere, hydrosphere, lithosphere, and biosphere in geologic time. Long-range geological effects of ecosphere pollution. Trace nutrients and health, with emphasis on the geology of trace-elements and their cause and effect on biological systems. Understanding of, control for, and prevention of natural hazards. Changes in the Earth's climate. Role of geology in land use. Lectures only. NOTE: Students in degree programmes in Geology may not take this course for Geology credits.

GEOL 205 Non-Renewable Resources (3 credits)

Prerequisite: None; GEOL 210 recommended. Rocks and ore minerals. Present and future availability of Earth resources. The nature, classification, and mode of occurrence of mineral deposits. Exploration, development, and rational exploitation of mineral resources. Elements of mining economics. Distribution of oil, gas, coal, and base-metal deposits. Evaluation of the effects of mining operations on the environment. Lectures only.

NOTE: Students in degree programmes in Geology may not take this course for Geology credits.

GEOL 206 Earthquakes, Drifting Continents and Volcanoes (3 credits)

The aim of the course is to provide an up-to-date account of our present knowledge of earthquakes and volcanoes and their global connections which are of general interest for students with little or no previous background in Earth sciences. Areas of concentration are: nature, distribution, and causes of earthquakes

^{*}Admission suspended for 2000-01.

and volcanic eruptions, earthquake waves and their effects, measuring earthquakes, great earthquakes and volcanic eruptions in world history, products of volcanic eruptions, four billion years of volcanism on the Earth and elsewhere in the solar system. Prediction of earthquakes and volcanic eruptions and global connections between earthquakes, drifting continents, and volcanoes. Lectures only. NOTE: Students in degree programmes in Geology may not take this course for Geology credits.

GEOL 208 The Earth, Moon and the Planets (3 credits)

The course emphasizes the cosmic perspective of the Earth and focuses attention on how the results of the last two decades of planetary exploration have brought about an intellectual revolution concerning the planets, especially their surface features, processes, and histories. Lectures only.

NOTE: Students in degree programmes in Geology may not take this course for Geology credits.

GEOL 210 Introduction to the Earth (3 credits)

This course provides an overview of the physical processes that govern how the Earth works. Topics include origin of the solar system and Earth; analysis of the internal structure of the Earth; minerals and rocks; igneous and metamorphic processes; deformation of the crust; surficial processes, including weathering, deposition and glaciation. The course culminates with the integration of these geological processes in the theory of plate tectonics, and goes on to examine the interactions of crust, mantle, atmosphere, and biosphere from this perspective. Laboratory work includes the identification of rocks and minerals, map exercises, and a field trip. Lectures and laboratory.

GEOL 211 *Mineralogy I* (3 credits)
Physical and chemical properties of minerals.
Crystallography, crystal notation, stereographic projection. Crystal structures. Identification, description, and classification of minerals. One or two field trips near Montréal. Lectures and laboratory.

GEOL 213 Structural Geology (3 credits) Prerequisite: GEOL 210. The course is an introduction to primary and deformational structures in rocks. Emphasis is placed on recognition, classification and nomenclature of structures on maps and in the field. Laboratory exercises emphasize map reading and interpretation, structural analysis, descriptive geometry, and stereographic projections. Lectures and laboratory.

GEOL 216 *Field Methods* (3 credits)
Prerequisite: GEOL 213; GEOL 231. Elements of surveying, construction of base maps. Geological field methods: description and recording of geological field data, construction of geological

maps. Collection and presentation of field data in exploration geophysics and exploration geochemistry. One lecture per week in the Winter Session and two-week field school in the Spring, immediately after the final examinations.

GEOL 231 Physics of the Earth (3 credits)
Prerequisite: Cégep Mathematics 103 or
MATH 203; cégep Mathematics 203 or
MATH 205; cégep Physics 301 or PHYS 206
and 226; GEOL 210 or equivalent. This course
is directed towards the general understanding of
physical phenomena of the solid Earth. Subjects
for consideration include the following: Earth's
origin, age, radioactivity, magnetism, gravity
field, seismology, heat flow, structure and
physical state of the Earth's interior. Lectures
and laboratory.

NOTE: Students who have received credit for GEOL 221 may not take this course for credit.

GEOL 232 Introduction to Geochemistry (3 credits)

Prerequisite: Cegep Chemistry 201 or CHEM 206; cegep Physics 301 or PHYS 206 and 226; cegep Mathematics 103 or MATH 203; cegep Mathematics 203 or MATH 205; GEOL 210. The course focuses on the application of concepts of elementary chemistry to geological problems. Subjects for consideration include: application of thermodynamics to geological problems, phase equilibria relationships in petrogenesis, partitioning of elements, crystal chemistry, distribution of elements, chemistry of natural waters including properties of water at high temperatures and pressures. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 223 may not take this course for credit.

GEOL 233 Introductory Hydrogeology (3 credits)

Prerequisite: GEOL 210; CHEM 206; MATH 205. This course is an introduction to the physical and geochemical aspects of hydrogeology, with emphasis on groundwater in its physical and geochemical aspects, influence on geotechnical engineering, and contamination. Lectures and laboratory.

NOTE: Students who have received credit for this topic under a GEOL 298 or 398 number may not take this course for credit.

GEOL 298 Selected Topics in Geology (3 credits)

GEOL 299 Selected Topics in Geology (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GEOL 302 *Palaeobiology* (3 credits)
Prerequisite: GEOL 210. General discussion covers taphonomy, processes and patterns of evolution, extinction, ontogeny, palaeoecology and taxonomy. Systematics, morphology, biostratigraphic value of selected macro-

invertebrate fossils will be included in the latter half of the course. Lectures and laboratory. NOTE: Students who have received credit for GEOL 212 may not take this course for credit.

GEOL 311 Introductory Petrology (6 credits)

Prerequisite: GEOL 211. The identification and description of hand specimens of igneous, sedimentary, and metamorphic rocks. Rock associations. Classification and origin of major rock groups. Lectures and laboratory.

GEOL 313 Optical Crystallography (3 credits)

Prerequisite: GEOL 211. Behaviour of light in crystals. The optical indicatrix. The polarizing microscope and optical properties of minerals. Identification of non-opaque minerals in oil immersion and thin sections. If time permits, use of the Universal Stage will be introduced. Lectures and laboratory.

Stratigraphy (3 credits) **GEOL 314** Prerequisite: GEOL 302; GEOL 311 previously or concurrently. Introduction to historical developments of stratigraphic concepts. Role of natural dynamic processes in the evolution of stratigraphic record. Discussion on stratigraphic classification and nomenclature. Major classification of tectonic elements in sedimentary basins, and broad patterns in the distribution of sedimentary rocks in relation to tectonic framework. Detailed analysis of stratigraphic principles, such as correlation (lithostratigraphic, biostratigraphic, chronostratigraphic), facies (lithofacies, biofacies), unconformities, and cyclothem. Critical evaluation of stratigraphic sequences using modern and ancient examples for the recognition of aeolian, alluvial fan, fluvial, lacustrine tidal flats, barrier coastlines, carbonate shoreline, shallow marine and submarine environments.

GEOL 316 Field Geology (3 credits)
Prerequisite: GEOL 216; GEOL 311 or
permission of the Department. Two-week
fieldwork right after the final examination period.
Working in groups, students map an area,
prepare sections, and submit a geological map
and/or written report. Group studies of important
outcrops or outcrop areas and quarries.
Transportation is provided by the Department
but students must pay for board and lodging.
NOTE: Students taking this course in their final
year may not be able to graduate in the spring
of the same year.

Lectures and laboratory.

GEOL 318 Structural Geology II (3 credits) Prerequisite: GEOL 213. Concepts of strain and mechanics of deformation. Description of tectonic fabrics and analysis of folds; identification and interpretation of polyphase deformation. Regional structural associations and their evaluation. Laboratory includes field-oriented structural problems, drill holes, and regional structural analysis. Use of aerial photographs in the preparation of geological maps and sections.

Several field trips and structural mapping of selected outcrops or outcrop areas. Lectures and laboratory.

GEOL 324 Remote Sensing and Terrain Analysis (3 credits)

Prerequisite: GEOL 210 or GEOG 270; GEOL 213 recommended. An introduction to a variety of Earth sensing techniques including aerial photography, airborne magnetometer surveys, aerial thermography, side-looking aerial radar, and multispectral scanning from satellites. Emphasis is placed on geological and geographical applications of terrain analysis. LANDSAT imagery, airphoto, stereo pairs, and aero-magnetic maps are used in the laboratory for the analysis of a number of selected areas. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 215 or 224 may not take this course for credit.

GEOL 325 Geostatistics and Computer Applications in Geology (3 credits)

Prerequisite: GEOL 210; INTE 290 or COMP 201 or permission of the Department. This is an introductory course in the application of statistical methods to geological problems. Topics covered include sampling from geological populations, binomial, Poisson, normal and lognormal distribution; sampling distribution and applications; analysis of variance: simple linear regression, introduction to multivariate data analysis techniques; multiple regression, factor analysis, cluster analysis, and discriminant analysis. Lectures and laboratory. NOTE See §200.7

GEOL 331 Historical Geology (3 credits)
Prerequisite: GEOL 302; GEOL 213; or
permission of the Department. Fundamental
concepts in historical geology; principles of
stratigraphy, paleo-geography, and
geochronology. A systematic review of the
geological history of the Earth and development
of life forms from the Precambrian to Recent.
Geological evolution of classical areas with
special attention to the North American
continent. Studies of stratigraphic sections and
geological maps. Lectures and laboratory.
NOTE: Students who have received credit for
GEOL 310 may not take this course for credit.

GEOL 332 *Economic Geology* (3 credits)
Prerequisite: GEOL 311 previously or concurrently. The course deals with the genetic concepts leading to the formation of metallic and non-metallic mineral deposits, their classification, world distribution, and economic evaluation. Concepts related to zonation, metallogenic provinces, metallotects, and exploration and evaluation of mineral deposits are also dealt with. Laboratory includes examination and study of selected ore-suites from the most important mining camps, ore reserve calculations, core logging and economic feasibility studies of clas-

sical mineral deposits. Lectures and laboratory. NOTE: Students who have received credit for GEOL 317 may not take this course for credit.

GEOL 398 Selected Topics in Geology (3 credits)

GEOL 399 Selected Topics in Geology (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GEOL 411 Igneous and Metamorphic Petrology (6 credits)

Prerequisite: GEOL 311; GEOL 313. Interpretation of phase diagrams. Mineralogy, fabric, and petrogenesis of igneous and metamorphic rocks. Magmatic and metamorphic processes. ACF and AKF diagrams for various metamorphic facies. Study of selected problems. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 390 may claim only three credits for this course.

GEOL 413 Sedimentary Petrology (3 credits)

Prerequisite: GEOL 311; GEOL 313. General principles of sediment diagenesis, followed by detailed analysis of the diagenetic evolution of sandstone, shale, and carbonate rocks. Emphasis is placed heavily on the microscopic criteria in the recognition of diagenetic fabric. Problems of primary sedimentary structures and their hydro-dynamic interpretation are also discussed. Specialized topics on current development in sedimentary lithogenesis are also included. Lectures and laboratory.

GEOL 414 Undergraduate Research (6 credits)

Prerequisite: For third-year Honours students. Honours students in their final year are expected to show competence in isolating and examining a geological problem under the supervision of a faculty adviser. A written application to take the course, including a brief outline of the research project, must be made to the Department before April 15 of the second year. The application is reviewed by a committee and a decision forwarded by mail. The results of research must be presented in the form of an undergraduate thesis, two copies of which must be submitted by April 1. NOTE: Written requests from Specialization students, with appropriate academic records, to take the course will be considered.

GEOL 415 Plate Tectonics and Crustal Evolution (3 credits)

Prerequisite: GEOL 213; GEOL 231; GEOL 311. Techniques of data collection in tectonics. Structure and rheology of the upper mantle. Tectonics of crustal types to include shields, platforms, passive continental margins, phanerozoic foldbelts, continental rifts, island-arc trench belts and oceanic rises, sea-floor spreading, plate tectonics, magma

associations, and plate reconstructions. Crustal origin and growth. Lectures and laboratory. NOTE: Students who have received credit for GEOL 315 may not take this course for credit.

GEOL 417 Mineral Deposits (3 credits)
Prerequisite: GEOL 332; GEOL 411 previously or concurrently. The course deals with the study of ore deposits generated by magmatic segregation, contact metasomatic, hydrothermal, volcanogenic, sedimentary and supergene enrichment processes. Concepts of geothermometry, geobarometry, and stable isotopes are also dealt with. Examples of particular geological interest from the most representative mining districts of the world. Laboratory includes petrological examination of metallic suites, fluid inclusion, and Vickers microhardness tests. Lectures and laboratory. NOTE: Students who have received credit for GEOL 416 may not take this course for credit.

GEOL 422 Exploration Geophysics (3 credits)

Prerequisite: GÈOL 231 or permission of the Department. A brief study of the principles of magnetic, gravimetric, electric, and seismic methods of mineral exploration; interpretation of geophysical data; organization of exploration programmes; selected case histories. Lectures and laboratory.

GEOL 424 Engineering Geology (3 credits)

Prerequisite: GEOL 210 or equivalent; GEOL 213 and GEOL 324 recommended. Engineering properties of rocks and soils. Landslides, groundwater, frost action, and permanently frozen ground. Application of geology to engineering problems—concrete petrology, tunnels, slope control, foundations, roads, airports, dams, and reservoirs. One term paper to be prepared. The laboratory period includes field trips, engineering geology case histories, and feasibility study of engineering geology problems. Lectures and laboratory.

GEOL 440 Seminar in Current Research on Environmental Earth Science (3 credits)

Prerequisite: GEOL 331 or GEOG 377, or advanced standing in an engineering programme, or permission of the Department. This course covers current research in environmental Earth science; topics vary from year to year, but will generally include: mantle-biosphere-atmosphere interactions, the carbon and methane cycles, and the geological climate record. Evaluation is based on seminar participation and written work. NOTE: Students who have received credit for this topic under a GEOG or GEOL 498 number may not take this course for credit.

GEOL 498 Advanced Topics in Geology
(3 credits)

GEOL 499 Advanced Topics in Geology (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.160

HISTORY

Faculty

Chair STEPHEN J. SCHEINBERG, Professor

Professors Emeritus ALAN H. ADAMSON DONALD E. GINTER EDWARD E. McCULLOUGH

Professors

CHARLES L. BERTRAND FREDERICK BODE RICHARD J. DIUBALDO RONALD RUDIN ROBERT TITTLER MARY VIPOND

Associate Professors GRAHAM CARR FRANK R. CHALK M. GRAEME DECARIE CAROLYN FICK JOHN L. HILL
NORMAN INGRAM
FREDERICK H. KRANTZ
SHANNON McSHEFFREY
DIANA PEDERSEN
ROSEMARIE SCHADE
FRANZISKA E. SHLOSSER
MARTIN SINGER
WALTER VAN NUS

Adjunct Professor
GEOFFREY ADAMS
GISELA CHAN MAN FONG
DOLORES CHEW
ROBERT T. COOLIDGE
MICHAEL MASON
ALAN O'DAY
DONALD SAVAGE
IRVING H. SMITH
SYLVIE TASCHEREAU
FIONA TOMASZEWSKI

Location

Loyola Campus Vanier Extension, Room: VE 323 (514) 848-2430 Sir George Williams Campus J.W. McConnell Building, Room: LB 601 (514) 848-2435

Department Objectives

It is the mission of the Department of History not only to train historians but to produce articulate and informed graduates who share its commitment to serving the broader community. The Department therefore encourages strength in both teaching and research, responsiveness to a wide range of intellectual perspectives, and involvement in community affairs.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

60 BA Honours in History

The following courses in an approved sequence constitute Honours in History. Students intending to enter the Honours programme are advised to consult with the Department.

A. Honours Essay Option

- 6 European History (HIST 201³, 202³)
- 6 North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³)
- 6 Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 3 HIST 200- or 300-level courses
- 12 HIST 300-level courses
- 3 HIST 304³ (Tutorial Preparation for the Honours Essay)
- 3 HIST 402³ (The Philosophy and Practice of History)
- 3 HIST 403³ (Methodology and History)
- 6 HIST 493⁶ (Honours Essay Tutorial)
- 12 HIST 400-level seminars

B. Seminar Option

- European History (HIST 2013, 2023)
- North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³)
- Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 6 HIST 200-level courses
- 12 HIST 300-level courses
- 3 HIST 402³ (The Philosophy and Practice of History)
- 3 HIST 403³ (Methodology and History)
- 18 HIST 400-level seminars

60 BA Specialization in History

- 6 European History (HIST 201³, 202³)
- North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³)
- 6 Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 6 HIST 200-level courses
- 27 HIST 300-level courses

- 3 HIST 312³ (Historical Approaches and *Practices*)
- 6 Chosen from any HIST 400-level courses

60 BA Joint Specialization in English and History

- 6 Chosen from ENGL 264³, 265³, 266³
- 6 Periods before 1800 (British and European) from ENGL 302⁶ through 324⁶, 430³ through 441³
- 6 Canadian, American, and postcolonial from ENGL 363³ through 388³, 448³ through 454³
- 6 19th century and 20th century (British and European) from ENGL 324³ through 359³, 394³, 442³, 443³, 445³ through 447³
- 6 Elective credits from ENGL 224³ through 499³
- 6 HIST 2013, 2023
- 6 Chosen from HIST 203³, 205³, 251³, 253³
- 6 200-300 level non-Western HIST
- 3 300-level pre-1800 Canadian, American, British, or European HIST

- 3 300-level post-1800 Canadian, American, British, or European HIST
- 6 300-400 level History elective credits

42 BA Major in History

- 6 European History (HIST 2013, 2023)
- 6 North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³)
- 6 Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 18 Chosen from any HIST 300-level courses
- 6 Chosen from any HIST 300- or 400-level courses

24 Minor in History

- 2 HIST 200-level (Field Surveys) from among: European History (HIST 201³, 202³) or North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³) or Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 12 credits in History with a minimum of six credits at the 300 level

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- 300-level courses are generally open only to students who have successfully completed 24
 credits. Students who do not have this prerequisite may register with the permission of the
 Department.
- (2) 400-level courses are generally open to Honours and Specialization students, or students of high academic standing, or with the permission of the Department.

HIST 201 Introduction to European History to 1789 (3 credits)

A survey of the history of Europe to the French Revolution, with emphasis on the development of ideas and political institutions.

HIST 202 Introduction to European History, from 1789 to the Present (3 credits)

A survey of the history of Europe from the French Revolution to the present, with emphasis on the development of ideas and political institutions.

HIST 203 History of Canada, Pre-Confederation (3 credits)

A survey of Canadian history, from settlement to Confederation, emphasizing readings and discussions on selected problems.

HIST 205 History of Canada, Post-Confederation (3 credits)

A survey of Canadian history from Confederation to the present, emphasizing readings and discussions on selected problems.

HIST 206 Introduction to the Non-Western World I (3 credits)

By giving an account of the worlds of Asia, Africa and the Americas between c. 1400 and c. 1900 we seek to show the interplay between local and international historical developments in the making of the global economy. In this course, we study both the largely autonomous developments of such centres of civilization as China and the Ottoman Empire, and the effects on the non-Western world of European expansion. The course ends with a discussion of the Age of Empire.

HIST 207 Introduction to the Third World, 1945 to the Present (3 credits)

This course covers the emergence and development of the Third World from 1945 to the present. It focuses principally on the development policies of Third World leaders and seeks to explain the effects which they have had on economic and social development.

HIST 209 Québec to 1867 (3 credits)

An introductory survey of the history of Québec from its origins as a colony to the creation of modern Canada by the British North American Act of 1867. Particular emphasis is placed on a consideration of those elements of Québec's past which best assist in the comprehension of the trends prevalent in modern Québec.

HIST 210 Québec since Confederation (3 credits)

A survey of the history of Québec from the time of Confederation until the present. While due emphasis is placed on political developments in the province, the purpose of the course is to acquaint the student with the significant economic and social trends in modern Québec.

HIST 215 History of Recreation and Leisure in Canada (3 credits)

A survey of the history of recreation and leisure from the time of European contact with native peoples to the present day. It is placed in the context of Canadian history to examine such phenomena as European and American influences on Canada, effects of urbanization, the roles of women in society, and the commercialization of leisure. Recreation and leisure are understood to include not only sports and games, but such activities as rural bees, education, drinking, gambling, and celebrations. The course also provides an introduction to the historical literature on recreation and leisure, and to the discipline of History.

HIST 219 (also listed as CLAS 230) Ancient Near East (3 credits)

A political, social, economic, and intellectual history of the ancient Near East, this course surveys the period from the origins of civilization in the middle of the fourth millennium to Alexander the Great's conquest of the Persian Empire in the latter part of the fourth century B.C.

NOTE: Students who have received credit for CLAS 230 may not take this course for credit.

HIST 223 (also listed as CLAS 240) Greek History from the Bronze Age to Alexander (3 credits)

This course offers a political, social, economic, and cultural history of Greece from the Minoan-Mycenaean period in the second millennium to the end of Classical Greek civilization in the fourth century B.C., with special emphasis placed upon Athens.

NOTE: Students who have received credit for CLAS 240 may not take this course for credit.

HIST 225 (also listed as CLAS 242) History of the Roman Republic (3 credits)

This course offers a political, social, economic and cultural history of Rome from the city's origins to the establishment of the Roman Empire under the Emperor Augustus.

NOTE: Students who have received credit for CLAS 242 may not take this course for credit.

HIST 251 History of the United States to 1877 (3 credits)

Survey of American history from settlement to 1877. The course deals with the political and economic framework of American history, and with social and cultural trends.

HIST 253 History of the United States since 1877 (3 credits)

Survey of American history from 1877 to the present. The course deals with the political and economic framework of American history, and with social and cultural trends.

HIST 261 History of India (3 credits) An introduction to the intellectual traditions, social structures, and political institutions of South Asia, with particular attention to developments during the past two centuries.

HIST 262 History of China (3 credits)
A survey of China's history from earliest times to the modern era.

HIST 263 *History of Japan* (3 credits) A survey of Japan's history from earliest times to the modern era.

HIST 264 History of Africa (3 credits)
An introductory survey of African history from the fifteenth century to the present. Particular emphasis is placed on pre-colonial Africa and the impact of colonialism on its political and economic patterns.

HIST 276 History of Latin America: The Colonial Period (3 credits)

A survey of Latin America up to the wars of independence from Spain. The main themes examined are: pre-Columbian cultures; the Spanish conquest; patterns of colonial trade and economy; the role of the church; the Bourbon reforms.

NOTE: Students who have received credit for HIST 371 may not take this course for credit.

HIST 277 History of Latin America: The Modern Period (3 credits)

A survey of Latin American society in the nineteenth and twentieth centuries. The principal topics covered are: the social and economic roots of political instability; Mexico under Porfirio Díaz; the Mexican Revolution; Argentina and Brazil under Perón and Vargas; U.S.-Latin American relations; Castro's Cuba; revolution and counter-revolution in contemporary Latin America.

NOTE: Students who have received credit for HIST 374 may not take this course for credit.

HIST 298 Selected Topics in History (3 credits)

HIST 299 Selected Topics in History (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

HIST 300 British North America (3 credits)

Prerequisite: See N.B. number (1). This course

examines British imperial policy, cross-cultural contact and the development of colonial societies in 18th- and 19th-century North America.

HIST 301 Late Nineteenth-Century Canada (3 credits)

Prerequisite: See N.B. number (1). This course examines the politics of confederation and explores the social, economic, and cultural impact of modernization.

HIST 304 Tutorial Preparation for the Honours Essay (3 credits)

Prerequisite: Approved Honours standing in History, or permission of the Department. This course provides Honours students in History with the opportunity for tutorial reading and research in preparation for the writing of the Honours Essay.

HIST 305 Women in Canadian History (3 credits)

Prerequisite: See N.B. number (1). A survey of the position and roles of women in Canadian society from the seventeenth century to the present. Topics covered include women's work, the family and the pre-industrial and modern industrial economies; ideological constructions of feminity, motherhood, and sexuality; and the development of feminist and anti-feminist movements.

HIST 306 Introduction to Public History (3 credits)

Prerequisite: See N.B. number (1). This course is an examination of the practice of history outside the academy and an introduction to the critical analysis of presentations of history in public and popular culture. Topics include archives, corporate and popular history, museums and historic sites, preservation, film and television, theme parks, and anniversary commemorations. There will be a special emphasis on public controversies involving historical interpretations.

NOTE: Students who have received credit for HIST 347 may not take this course for credit.

History of Montréal (3 credits) Prerequisite: See N.B. number (1). A study of the origins of the city, its role in the Empire of the St. Lawrence, and its rise to metropolitan dominance in Canada. Special emphasis on economic development and on ethnic groupings.

HIST 308 History of English-Speaking Québec (3 credits)

Prerequisite: See N.B. number (1). An analysis of the experience of the different groups which have made up this community, from the Conquest to the present.

HIST 309 History of the Canadian North (3 credits)

Prerequisite: See N.B. number (1). An intensive study of the advance of the northern frontier of Canada, with emphasis on the period 1840-1945. The course stresses exploration, problems of sovereignty, conflict of cultures, and economic development.

HIST 310 Canada in the Early Twentieth Century, 1896-1939 (3 credits)

Prerequisite: See N.B. number (1). An intensive study of early twentieth-century Canada concentrating on selected themes in economic, political, social, and cultural history.

Contemporary Canada, 1939 to **HIST 311** the Present (3 credits)

Prerequisite: See N.B. number (1). An intensive study of Canada since World War II concentrating on selected themes in economic, political, social, and cultural history.

HIST 312 Historical Approaches and Practices (3 credits)

Prerequisite: Specialization or Major in History, or permission of the Department. This course addresses a specific historical problem which varies from year to year depending on the instructor. Historiography and methods (including online research) are emphasized. NOTE: Students who have received credit for HIST 302, 303, 397, 402, or 403 may not take this course for credit.

HIST 313 Québec in the Nineteenth Century (3 credits)

Prerequisite: See N.B. number (1). This course explores the major social, economic, and political issues that arose during the 1800s in the transformation of Québec from a pre-industrial to an industrial society.

HIST 314 Québec in the Twentieth Century (3 credits)

Prerequisite: See N.B. number (1). This course explores the major social, economic, and political issues of twentieth-century Québec in the light of the concentration of economic power into relatively few hands early in the century and the declining importance of industrial production since World War II.

HIST 316 History of the Byzantine Empire, 602-1056 (3 credits)

Prerequisite: See N.B. number (1). A survey of the transformation from Late Antiquity into the Byzantine commonwealth. Changes in economic and social conditions will provide the general framework, with special attention given to the reorganization of administrative and military structures, Byzantium's relationship with its Balkan neighbours, the Arab conquest, and the rising importance of Asia Minor. NOTE: Students who have received credit for

HIST 324 may not take this course for credit.

HIST 317 Canada Views the United States (3 credits)

Prerequisite: See N.B. number (1). An examination of Canadian attitudes to the United States

from 1776 to the present, with respect to both specific incidents and general trends. Emphasis is placed on the discussion of primary source material.

HIST 318 History of the Byzantine Empire, 1056–1453 (3 credits)

Prerequisite: See N.B. number (1). A survey of Byzantine Empire from the end of the Macedonian dynasty to the Turkish conquest of Constantinople. Changes in economic and social conditions will provide the general framework, with special attention given to the reorganization of administrative and military structures, Byzantium's relationship with its Balkan neighbours, the Islamic conquest, and the rising importance of Asia Minor. NOTE: Students who have received credit for

NOTE: Students who have received credit for HIST 324 may not take this course for credit.

HIST 319 Canadian History in Literature, Art and Film (3 credits)

Prerequisite: See N.B. number (1). An examination of some major events and themes in Canadian history as seen by writers, artists, and film-makers. Topics will vary from year to year, but will be selected to illustrate how creative works may be combined with more conventional historical sources to enhance our understanding of the past.

HIST 323 (also listed as CLAS 341) Greek History from Alexander to the Roman Conquest

(3 credits)

Prerequisite: See N.B. number (1). A political, social, economic, and cultural history of the Greek world from Alexander the Great to the Roman conquest of Greece in 146 B.C. NOTE: Students who have received credit for CLAS 241/HIST 224 or CLAS 341 may not take this course for credit.

HIST 325 Renaissance Europe (3 credits)
Prerequisite: See N.B. number (1). This course
explores the transition from later Medieval to
Renaissance Europe. Special attention is given
to the nature, development, and influence of the
Italian Renaissance. Attention is also given to
social and political issues in early modern Europe.

HIST 326 Reformation and Counter-Reformation in Early Modern Europe (3 credits)

Prerequisite: See N.B. number (1). An examination of the European Reformation and Counter-Reformation. Beginning with the late medieval context, the course stresses the significance of the period for the development of Western thought and society.

HIST 327 (also listed as CLAS 343) History of the Roman Empire (3 credits)

Prerequisite: See N.B. number (1). This course offers a political, social, economic, and cultural history of the Roman Empire from Augustus to

the end of the Roman Empire in the West. NOTE: Students who have received credit for CLAS 243/HIST 226 or CLAS 343 may not take this course for credit.

HIST 328 Social and Intellectual History of Early Modern Europe (6 credits)

Prerequisite: See N.B. number (1). A study of change and continuity in European society and culture, 1300-1650. Problems studied include feudal-capitalist relationships, the Italian Renaissance, Northern State Development, Protestant Reformation, Scientific Revolution, and European Colonial expansion. Methodological issues are emphasized.

HIST 329 Women in Western History I (3 credits)

Prerequisite: See N.B. number (1). A survey of the position and roles of women in Western history from antiquity to the French Revolution. Themes analysed in the lectures and in discussions include: women's position in early law; the concept of courtly love; women in the French Revolution; the working woman in pre-industrial Europe.

HIST 330 Urban Society in Early Modern Europe (3 credits)

Prerequisite: See N.B. number (1). This course is a survey of urban society from the Renaissance to the eve of Industrialization (c. 1450–1750), with an emphasis on cities in Western and Central Europe. Particular attention will be paid to civic building and urban planning, population and social structure, political and economic organization, economic life, and civic culture.

HIST 331 Women in Western History II (3 credits)

Prerequisite: See N.B. number (1). A survey as above but covering the period from after the French Revolution to modern times. Themes analysed in the lecture and in discussions include: women in post-industrial Europe; the Suffrage Movement; the Feminist Movement in Europe and North America; women during the two World Wars; women in the modern work-force.

HIST 332 Social History of Costumes and Interiors I (3 credits)

Prerequisite: See N.B. number (1). A social history of European civilization as reflected by fashions in dress and interiors. Dress especially mirrors accurately a society's ideals in aesthetics and morals; interiors indicate lifestyles and social habits. Both costumes and interiors are treated in this course as an illustration of social history underscoring social change as from era to era. The course covers a time-span from the Middle Ages to the Renaissance, including a brief introduction to the classical period.

HIST 333 Social History of Costumes and Interiors II (3 credits)

Prerequisite: See N.B. number (1). Based on

the same principles as HIST 332, this course covers a time-span from the Reformation to the Victorian Age.

HIST 334 Social and Intellectual History of Modern Europe (6 credits)

Prerequisite: See N.B. number (1). The intellectual systems arising in Europe since the seventeenth century are explored in the context of the economic and social circumstances which engendered them. This course begins with the rise of theories of "possessive individualism", and ends with the contemporary cultural crisis. While attention is paid to the general dynamics of culture, special attention is devoted to the social functions of particular ideologies.

HIST 335 Barbarian Invasions and the Birth of Europe (3 credits)

Prerequisite: See N.B. number (1). This course examines the arrival and settlement of new populations in the Roman world. It analyses the changes that this event brought in its wake. Classical civilization was disrupted, but there was also a symbiosis of the old and the new, which in time gave rise to Europe in the Middle Ages.

HIST 336 Late Antiquity: Continuity and Change (3 credits)

Prerequisite: See N.B. number (1). This course examines the similarities and contrasts between society in Late Antiquity and the new societies that arose based on Christianity, barbarian kingdoms, and the East Roman Empire. We pursue what Peter Brown has called *The World of Late Antiquity*, its culture, social patterns, political institutions, and economic conditions that interlock to form new and distinct societies in a world that had regarded itself for centuries as being "universal".

HIST 337 History of Early Medieval Europe (3 credits)

Prerequisite: See N.B. number (1). A study of European society during the Early Middle Ages. The course will explore the fall of the Roman Empire in the West, the period of invasions, the conversions to Christianity and the development of the Western Latin Church, the rise of the Carolingians, the Viking raids, and the structures of society and politics.

NOTE: Students who have received credit for HIST 322 may not take this course for credit.

HIST 338 History of Later Medieval Europe (3 credits)

Prerequisite: See N.B. number (1). A study of European society during the Later Middle Ages. The course will explore the ramifications of the revival of urban and commercial life, the development of national monarchies in France, England, and Spain, the varying fortunes of the Holy Roman Empire, the rise and fall of papacy, the problem of dissent in a theoretically unified society, and the effects of economic chaos and epidemics in the age of the Black Death. NOTE: Students who have received credit for HIST 322 may not take this course for credit.

HIST 340 History of England, c. 1460–1714 (3 credits)

Prerequisite: See N.B. number (1). This course is a survey of the political, economic, and social development of England from the late Middle Ages through the Stuart Era.

NOTE: Students who have received credit for

NOTE: Students who have received credit for HIST 342 may not take this course for credit.

HIST 341 History of Britain Since 1714 (3 credits)

Prerequisite: See N.B. number (1). This course is a survey of the political, economic, and social development of Britain since the Stuart Era. NOTE: Students who have received credit for HIST 342 may not take this course for credit.

HIST 344 Tudor England (3 credits) Prerequisite: See N.B. number (1). A detailed examination of the political, social, and economic aspects of England in the Tudor age, 1485-1603. Particular attention is paid to "The New Monarchy", the Henrician Reformation and its consequences, the "Mid-Tudor Crisis", tensions between local and national interests, Elizabethan government, economic change, Puritanism and Catholicism, and the problem of order.

HIST 348 History of Ireland (3 credits)
Prerequisite: See N.B. number (1). A survey
course that traces the history of Ireland from
432 A.D. to the present. Emphasis is on the
nineteenth and twentieth centuries. Special
attention is given to the development of Irish
nationalism and relations with Great Britain.
Irish music and literature is used to supplement
the historical perspective.

HIST 349 Family, Sex and Marriage in Pre-Industrial Europe (3 credits)

Prerequisite: See N.B. number (1). This course deals with the development of marriage and other family relationships in the pre-industrial West, from the beginning of the Middle Ages to about 1700. Topics to be considered include Christian influence on Western ideas about sexuality and marriage; the organization of work within families; how families influenced gender identities; and attitudes towards child-rearing and education.

HIST 350 Medieval England (3 credits) Prerequisite: See N.B. number (1). This course examines the history of England between the Norman Conquest in 1066 and 1500. Topics include the political, social, and cultural impact of the Norman Conquest; Jews and the expulsion of 1290; knights and peasants; the Peasant's Revolt of 1381; crime and the Robin Hood legends; heresy and popular religion; urban culture and quilds.

HIST 351 German History in the 19th Century (3 credits)

Prerequisite: See N.B. number (1). A study of

the ideological, cultural, political, and socioeconomic development of Germany from the break-up of the Holy Roman Empire to the First World War.

NOTE: Students who have received credit for HIST 345 may not take this course for credit.

HIST 352 German History in the 20th Century (3 credits)

Prerequisite: See N.B. number (1). A study of the ideological, cultural, political, and socioeconomic development of Germany from the First World War to the present.

NOTE: Students who have received credit for HIST 345 may not take this course for credit.

HIST 353 Colonial America (3 credits)
Prerequisite: See N.B. number (1). This course
examines the earliest period of American history. It gives special emphasis to the nature of
Amerindian society, white-Amerindian contact,
and the varieties of colonial settlement patterns.

HIST 354 Revolutionary America (3 credits)

Prerequisite: See N.B. number (1). This course examines themes and issues in the revolutionary and early national periods of American history.

HIST 355 United States in the Nineteenth Century, 1815–1850 (3 credits)

Prerequisite: See N.B. number (1). A study of American political, social, and economic life from the end of the War of 1812 to about 1850 – the intensification of sectionalism. Topics include geographic expansion and the beginnings of industrialization, the characteristics of southern slave society, and the rise of a system of political parties during the age of Jackson.

HIST 356 United States in the Nineteenth Century: The Era of the Civil War (3 credits)

Prerequisite: See N.B. number (1). A study of American political, social, and economic life before and after the Civil War, from about 1850 to 1890. Topics include sectionalism and the breakdown of parties during the 1850s, the tasks of Reconstruction after the war, the New South, and the problems of a maturing industrial society.

HIST 357 Foreign Relations of the United States to 1917 (3 credits)

Prerequisite: See N.B. number (1). An analysis of United States foreign policy from the American Revolution to United States' entry into World War I, emphasizing the domestic debate over foreign policy and economic development, commercial and territorial expansion, and the dynamics of Canadian-American relations.

HIST 358 Foreign Relations of the United States, 1917 to the Present

(3 credits)

Prerequisite: See N.B. number (1). A historical investigation of United States foreign policy from

American intervention in the Russian Revolution to the present, emphasizing the United States' responses to the challenge of revolutions in Asia and Africa, American conceptions of a new world order, the rise of the multinational corporation and its impact on Canadian-American relations.

HIST 359 (also listed as SOCI 366) The History and Sociology of Genocide to 1920 (3 credits)

Prerequisite: See N.B. number (1). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to it up to 1920.

NOTE: Students who have received credit for HIST 368 or SOCI 366 or 368 may not take this course for credit.

HIST 360 (also listed as SOCI 367) The History and Sociology of Genocide from 1920 to the

Present (3 credits)

Prerequisite: See N.B. number (1). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that led to genocide from 1920 to the present.

NOTE: Students who have received credit for HIST 368 or SOCI 367 or 368 may not take this course for credit.

HIST 361 Africa in the Nineteenth Century (3 credits)

Prerequisite: See N.B. number (1). The central focus of this course is the European assault on Africa and the unfolding of colonial economy and society. Some emphasis is placed on resistance to colonialism and the origins of nationalism.

HIST 362 *Traditional China* (3 credits) Prerequisite: See N.B. number (1). An examination of Chinese history from the beginning to the Ch'ing dynasty (c. 1800). Emphasis is placed on China's political, intellectual, and cultural heritage.

HIST 363 Africa in the Twentieth Century (3 credits)

Prerequisite: See N.B. number (1). This course deals with questions of nationalism and of the economic and social development of colonial and post-colonial Africa. There is particular focus on liberation and revolutionary movements.

HIST 364 India/Pakistan: Empire and Resistance, 1750–1950 (3 credits)

Prerequisite: See N.B. number (1). British conquest established nearly two centuries of colonial rule over the world's oldest civilization. This course examines the nature of imperial control, the resistance of traditional leaders, European intellectual imperialism, Indian cultural and religious revivalism, and modern nationalism. Special attention is paid to M.K. Gandhi and Gandhism as well as to Muslim separatism and the Pakistan movement.

HIST 365 India/Pakistan: Money and Society Since 1800 (3 credits)

Prerequisite: See N.B. number (1). British India was a vital part of a great commercial and industrial empire at the highest stage of capitalism. This course explores the economic and social impact of this period on Indian society up to the present. Imperial capitalism, the Indian entrepreneurial elites, peasants and famine, industrialization, the effects of two world wars, and the challenge of communist and Islamic movements since independence are investigated.

HIST 366 Nineteenth Century China (3 credits)

Prerequisite: See N.B. number (1). An intensive study of Chinese history between 1800 and the beginnings of the Chinese Revolution with emphasis on problems in political, social, and intellectual history.

HIST 367 Twentieth Century China (3 credits)

Prerequisite: See N.B. number (1). An intensive study of Chinese history since 1900 with emphasis on problems in political, social, and intellectual history.

HIST 369 English Urban Community: From Feudalism to Industrialism, 1300–1700 (3 credits)

Prerequisite: See N.B. number (1). Topics include: the elements of urban geography; emergence of the town from the countryside; the late Medieval urban crisis; the impact of the Reformation on English towns; urban demographic patterns; commercial and industrial structures; new towns; civic planning and building; social control in the urban community; the emergence of an urban cultural identity. Familiarity with English history, English literature, preindustrial European history, or urban history is helpful but not essential.

HIST 370 The Modern Middle East to 1945 (3 credits)

Prerequisite: See N.B. number (1). This course is intended to provide a general historical background to the Middle East. Beginning with a discussion of the rise of Islam, it continues through the period of the rise of nationalism and ends at the beginning of the contemporary era.

HIST 372 The Contemporary Middle East, 1945 to the Present

(3 credits)

Prerequisite: See N.B. number (1). This course discusses the contemporary Middle East, focusing on such questions as the end of European influence, nationalism, fundamentalism and the Gulf War.

HIST 375 History of the Colonial Caribbean (3 credits)

Prerequisite: See N.B. number (1). This course covers the period from pre-Columbian contact to

the late eighteenth century. Themes include the origins of sugar and slavery; the slave trade; the rise of colonialism; the emergence and maturation of colonial social structure.

NOTE: Students who have received credit for HIST 380 may not take this course for credit.

HIST 376 The Caribbean and the Atlantic World (3 credits)

Prerequisite: See N.B. number (1). This course covers the period from the seventeenth century to the end of the nineteenth century. Themes include slavery and the slave community; modes of adaptation and resistance; the politics and economics of abolition; alternative labour forms; the rise of political movements.

NOTE: Students who have received credit for HIST 380 may not take this course for credit.

HIST 377 History of Russia (3 credits) Prerequisite: See N.B. number (1). This course traces the origins of the medieval Russian state from the ninth century to the emergence of the Russian Empire. Emphasis is placed on political, social, and economic problems of the eighteenth and nineteenth centuries. Particular attention is devoted to the Revolutions of 1905 and 1917.

HIST 378 History of the Soviet Union (3 credits)

Prerequisite: See N.B. number (1). This course examines the ideological roots of the Bolshevik Revolution, and traces the main economic, social, and political developments of the Soviet Union. In addition, an analysis of Soviet foreign policy is presented from 1917 to the present.

HIST 382 Age of Enlightenment 1715–1789 (3 credits)

Prerequisite: See N.B. number (1). An examination of major developments in European society from the death of Louis XIV to the French Revolution. Special attention is given to social and intellectual movements, more particularly to the rise of the bourgeoisie and to the key ideas of the Enlightenment.

HIST 383 Age of Revolution 1789–1848 (3 credits)

Prerequisite: See N.B. number (1). A study of the dual Revolution — industrial and political — in England and France, and its initial consequences throughout Europe.

HIST 384 Age of Industrialization and Nationalism 1848–1914

(3 credits)

Prerequisite: See N.B. number (1). A study of the transformation of European society, economy, and politics in the years between the upheavals of the mid-nineteenth century and the collapse of the traditional order in World War I.

HIST 385 Age of Dictators: Europe, 1914–1945 (3 credits)

Prerequisite: See N.B. number (1). A study of

the internal development and external relations of the nations of Europe from the Great War to the end of World War II. The course examines this chaotic age primarily through an investigation of the revolutionary and reactionary upheavals that kept Europe socially, politically, and economically unbalanced for 30 years.

HIST 386 Contemporary Europe: 1945 to the Present (3 credits)

Prerequisite: See N.B. number (1). A study of the internal development and external relations of the nations of Europe from the collapse of Nazi Germany to the present. The course concentrates on the divisions between East and West, the economic recovery of Europe and the effects of the energy crisis on social, economic, and political life throughout Europe.

HIST 388 History of Modern Italy: 1848 to 1922 (3 credits)

Prerequisite: See N.B. number (1). A survey of the crucial developments in Italian history from the Risorgimento to the rise of fascism. The course emphasizes the problems surrounding the creation of a united Italy. Specifically, the course examines the issues raised by nationalism, liberalism, Catholicism, and industrialization.

HIST 389 History of Modern Italy: 1922 to the Present (3 credits)

Prerequisite: See N.B. number (1). A survey of the crucial developments in Italian history from Mussolini's seizure of power to the present. The course examines the role and legacy of fascism, the creation of the republic, the economic miracle, the political and social turmoil, and the rise of terrorism.

HIST 390 France 1789–1871 (3 credits) Prerequisite: See N.B. number (1). This course introduces students to the history of France from the Revolution of 1789 to the Franco-Prussian War of 1870. Of central concern is the importance of the revolutionary heritage in nineteenth-century French history, but the course also looks at intellectual, social, and literary developments.

HIST 391 Independent Study Tutorial in History (3 credits)

Prerequisite: See N.B. number (1). This course permits individual study, with a selected faculty member, in a specialized area not available among regular 300-level classes.

HIST 392 France 1871 to the Present (3 credits)

Prerequisite: See N.B. number (1). This course introduces students to the history of France from the Commune of 1871 to the Fifth Republic. This course deals with such issues as the Dreyfus Affair, the legacy of two World Wars in French history, the Vichy regime, collaboration and French fascism, the May events of 1968, and so forth. Political, social, and intellectual developments will be discussed.

HIST 393 Vietnam War (3 credits)

Prerequisite: See N.B. number (1). The protracted Vietnamese conflict in both its French (1940-54) and American (1955-75) phases is analysed using lectures, audio-visual materials, documents, and soldiers' accounts. Vietnam's historical evolution and colonial experience are briefly discussed as essential to understanding the war as a military, political, and cultural struggle.

Prerequisite: See N.B. number (1). This course includes the rise of the corporation and the trade unions. The Populist, Progressive, and Suffrage Movements are given major attention.

HIST 395 The United States 1920–1945 (3 credits)

Prerequisite: See N.B. number (1). A study of Post World War I America that extends through World War II. Political and social history are emphasized.

HIST 396 The United States Since 1945 (3 credits)

Prerequisite: See N.B. number (1). The immediate historical background of today's America is the subject matter of this course. Major themes include civil rights, the rise of modern feminism, and economic change.

HIST 398 Selected Topics in History

(3 credits)

HIST 399 Selected Topics in History (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

HIST 402 The Philosophy and Practice of History (3 credits)

Prerequisite: Approved Honours standing in History, or permission of the Department. This course examines problems in the philosophy and practice of history. Particular attention is given to contemporary debates about history as a distinctive mode of understanding and explanation. This course is required of all Honours students.

NOTE: Students who have received credit for HIST 302 or 397 may not take this course for credit.

HIST 403 Methodology and History (3 credits)

Prerequisite: Approved Honours standing in History, or permission of the Department. This course examines the variety of sources, methods, and modes of analysis used in the research and writing of history. It addresses both theoretical and practical aspects of

method. This course is required of all Honours students.

NOTE: Students who have received credit for HIST 303 or 397 may not take this course for credit.

HIST 411 Seminar in Canadian History (6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of Canada. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 412 Advanced Study in Canadian History (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Canada. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 436 Seminar in European History (6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Europe. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 437 Advanced Study in European History (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Europe. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 451 Seminar in American History (6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of the United States. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 452 Advanced Study in American History (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of the United States. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 461 Seminar in Asian History (6 credits)

Prerequisite: See N.B. number (2). Advanced

seminar in Asian history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 462 Advanced Study in Asian History (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in Asian history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 470 Seminar in African History (6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of Africa. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 471 Advanced Study in African History (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Africa. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 476 Seminar in the Third World (6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of the Third World. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 477 Advanced Study in the Third World (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of the Third World. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 478 Seminar in Women's History (6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in women's history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 479 Advanced Study in Women's History (3 credits)

Prerequisite: See N.B. number (2). Advanced

seminar in a selected topic in women's history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 491 Individual Study Tutorial in History (3 credits)

Prerequisite: See N.B. number (2). This course permits an individual student to pursue advanced study, with a selected faculty member, in a specialized area not available among scheduled 400-level seminars.

HIST 492 Individual Study Tutorial in History (6 credits)

Prerequisite: See N.B. number (2). This course permits an individual student to pursue advanced study, with a selected faculty member, in a specialized area not available among scheduled 400-level seminars.

HIST 493 Honours Essay Tutorial (6 credits)

Prerequisite: See N.B. number (2). This course is open only to Honours students in History. The student works with an individual faculty member in a particular area of history. Students are asked to produce a sustained piece of written work, not exceeding 40 pages in length, to be read by their adviser and at least one other member of the Department.

HIST 498 Advanced Topics in History

(3 credits)

HIST 499 Advanced Topics in History

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.170 INTERDISCIPLINARY STUDIES

Administrator **DENNIS MURPHY**

Programme Objectives

The Faculty of Arts and Science *Principles of Education* (§31.001) reinforce the value of broadening skills and experience beyond the boundaries of a single concentration. Interdisciplinary studies involves students in a range of thought, from scientific to humanistic. Courses are designed to illuminate principles, methods, and skills that cross disciplinary boundaries. These programmes are intended for students whose interests do not conform to standard academic programmes.

INDIVIDUALLY STRUCTURED PROGRAMMES

Under the direction of M. Santateresa, Academic Adviser, Faculty of Arts and Science (LOY Campus)

Admission

Opportunities are available in some departments and programmes to follow an Individually Structured Specialization or Honours programme. Students must apply to the Department that seems most relevant to the central aspect of their proposed programme. Students in general must have demonstrated in their previous academic endeavours that they are capable of good standing ("B" level), but in exceptional cases a student may be admitted provisionally on the recommendation of the departmental undergraduate coordinator.

Formal entry to the ISP may occur only after completion of preparatory courses such as are required in Mature Entry and Extended Credit programmes. Students wishing to follow an Honours programme must follow the Faculty procedures and regulations concerning admission to Honours programmes. (see Degree Requirements — Honours, §16.2.3 and 31.003.) Students interested in completing a Joint Honours programme should contact M. Santateresa for advising.

Academic Regulations

The programme will consist of not less than 60 credits. The courses chosen must be based on a departmental or programme core, usually the Major, but not less than 24 credits. Students will thus be required to complete necessary prerequisites, and general preparation courses such as Research Methods or Statistics, so that they could later follow a regular departmental programme if they so

A Specialization student must maintain an average of "C+" in all Specialization courses for purposes of continuation in the programme from year to year, as well as for graduation. The minimum acceptable grade in any single Specialization course is "C-".

The programme of study must be worked out at the time of registration into the programme. Admission to the programme must be finalized before a student registers for the final 60 credits of the 90-credit portion of their degree. To allow for the non-availability of certain courses during certain sessions, allowable substitute courses must be listed in advance. Such substitution provisions will be necessary only in the case of specialized courses that are known not to be available on a session by session basis. The intention of this regulation is to assure that the programme does not become an ad hoc mixture of courses without clearly rationalized academic coherence.

Students must prepare a careful, not necessarily long, statement of their goals indicating the specific reasons for their programme choice. The rationale and the sequence of courses chosen must be approved by the departmental programme coordinator and the Vice Dean, Student Affairs.

Programmes

A Minor is a programme consisting of 24 or more credits (see §16.2 and 31.003). Students may choose either a Minor programme comprised of courses from a range of disciplines, or a Minor in a discipline other than their Honours, Specialization or Major programme. Interdisciplinary and disciplinary Minors are listed below.

Interdisciplinary Minors

Credits	Title	Cal. Sec.	
30	Science and Human Affairs	31.300	
30	Southern Asia Studies	31.170	
30	Urban Studies	31.340	
24	Lonergan Interdisciplinary Studies	31.530	

Dissiplinary Minara	Code	Credits	Title	Cal. Sec.
Disciplinary Minors	ANTH	30	Anthropology	31.310
	BIOL	24	Biology	31.030
	CHEM	24	Chemistry	31.050
	CMLL	24	Classical Archaeology	31.060
		24	Classical Civilization	31.060
		24	Classical Language and Literature	31.060
		30	German	31.060
		30	Italian	31.060
		30	Spanish	31.060
		30	Linguistics	31.060
	ECON	30	Economics	31.080
	EDUC	24	Education	31.090
		24	Adult Education	31.090
	ENGL	24	English Language	31.100
		30	Creative Writing	31.100
	FRAN	24	Langue française	31.110
		24	Littératures de langue française	31.110
	GEOG	30	Geography	31.130
	GEOL	24	Geology	31.140
	HIST	24	History	31.160
	JOUR	30	Journalism	31.180
	MATH	24	Mathematics and Statistics	31.200
	PHIL	24	Philosophy	31.220
	PHYS	24	Physics	31.230
	POLI	24	Political Science	31.240
	PSYC	30	Psychology	31.250
	SOCI	30	Sociology	31.310
	THEO	24	Theological Studies	31.330
	LBCL	30	Western Society and Culture	31.520
	WSDB	30	Women's Studies	31.560

Programme

INTERDISCIPLINARY STUDIES IN SEXUALITY

Students interested in this programme should contact Dr. Frances Shaver, Programme Coordinator, Faculty of Arts and Science, who will be replaced in January 2001 by a director from the Faculty of Fine Arts.

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

27 Minor in Interdisciplinary Studies in Sexuality

- 12 Chosen from INTE 391/FASS 391³, INTE 392/FASS 392³; SOCI 375/ ANTH 375^{3*}; FMST 392³; INTE 390/ FFAR 390⁶.
- 9 Elective credits on sexuality and sexual orientation chosen in consultation with the programme coordinator from periodic topics courses and other suitable courses identified in a given year, and from the following regular courses:
- AHSC 253³; ENGL 445³; FMST 393³; RELI 380³; WSDB 383³.
- 6 Chosen each year from courses in gender and women's studies in consultation with the programme coordinator from a list of available offerings within departments of the Faculties of Arts and Science and Fine Arts.
 - *Prerequisites waived for students having completed six credits in the Minor in Interdisciplinary Studies in Sexuality.

Programmes

SOUTHERN ASIA STUDIES

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

- 42 BA Major in Southern Asia Studies
- 9 Required in first year: HIST 261³, RELI 213⁶
- 3 Chosen from HIST 364³, 365³, 393³, 461⁶
- 6 Chosen from RELI 224³, 225³, 226³, 340³, 341³, 342³, 344³, 345³, 346³, 347³, 348³, 350³, 384³
- 6 Chosen from POLI 336³, 424³, 482³ NOTE: Any one of the above courses may be substituted by a Special Topic course on Southern Asia in the same Department.
- 18 Chosen from any relevant courses in the core disciplines (not already counted towards the above requirements) or

courses dealing with Southern Asia in the Departments of Economics, Education, English, Geography, Sociology/Anthropology or the Faculties of Fine Arts and Commerce and Administration

30 Minor in Southern Asia Studies

- Required: HIST 2613; RELI 2136
- Chosen from HIST 364³, 365³, 393³,

- 461⁶; POLI 336³, 424³, 482³; ECON 3113, 3193
- Chosen from RELI 224³, 225³, 226³, 340³, 341³, 342³, 344³, 345³, 346³, 347³, 348³, 350³, 384³; FMST 335³
- Elective credits from any courses dealing primarily with Southern Asia, and Special Topics courses in any discipline with a Southern Asia theme or focus

Clusters

A cluster is a sequence of courses (15 to 18 credits) on a given theme. It provides multi-disciplinary and interdisciplinary course content.

Credits	Cluster Name
18	Canadian Studies
18	Greek Studies
18	Health and Lifestyle
18	Introduction to Life Sciences
15	Irish Studies
18	Legal Studies
15	Marketing
18	Native Studies
18	Québec Studies
18	Spanish America
18	Preparing for Success in the Workplace: Skills, Issues and Practices
18	The Planet Earth: Studies in the Environment
15	Understanding Western Myth
15	The Basics of Business

Course information on these Clusters is listed in the Undergraduate Class Schedule.

Colleges, Institutes and Schools

Students wishing to pursue interdisciplinary studies may also wish to consider offerings in the Liberal Arts College §31.520, Lonergan University College §31.530, School of Community and Public Affairs §31.540, Science College §31.550, or Simone de Beauvoir Institute §31.560 (also described in §31.500).

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

INTE 202 (also listed as LUCC 202) The Creative Self (3 credits)

This course explores the relationship between experience, understanding and coming to knowledge as a contemporary person in search of identity. It is structured around the exploration of these questions: How can life experience become a source of creative understanding? How can the learning process become one's own? What methods are available to help us learn how to learn? How can we learn to live what we know? NOTE: Students who have received credit for LUCC 200 or 202 may not take this course for credit.

INTE 215 Ideas in Mathematics (3 credits) Mathematical ideas and techniques permeate Western civilization, but because mathematics operates at a high level of abstraction and uses an esoteric language, its contribution is not well understood. Avoiding mathematical technicalities as much as possible, this course attempts to demonstrate a few of the powerful ideas that have animated the development of mathematics. Examples of mathematical thinking from various periods of mathematical history are examined

and related to their scientific and social impact. NOTE: This course is designed as a suitable elective for students following an undergraduate programme. It has no formal prerequisites and will not qualify students to enrol for any other mathematics course, and cannot be used to satisfy a mathematics requirement in any BA or BSc programme.

NOTE: Students who have received credit for MATH 215 may not take this course for credit.

Philosophy and Literature **INTE 229** (6 credits)

This course focuses on the interaction of philosophy and literature in a selected period of history (for example, the ancient world; the Middle Ages and Renaissance; and the modern world), through readings and discussion of literature with a high thematic content and philosophical writings with important literary connections. NOTE: Students who have received a total of six credits for the set of courses consisting of INTE 230 or 231, or a total of six credits for the set of courses consisting of INTE 232 or 233, may complete the sequence by taking INTE 229 in the appropriate year (six credits).

INTE 290 Computer Applications (3 credits)

This course is intended for students who would not normally encounter computers in their programme of study. It is designed to introduce them to fundamental uses of computers in word processing, data management, and elementary programming, as a basis for more advanced applications within their disciplines. This is accomplished by means of a series of tutorial packages combining printed text, videotapes, and software. The format is self-instructional, encompassing 40 hours of hands-on experience in the laboratory.

NOTE: Computer Science students may not take this course for credit.

INTE 291 Advanced Computer Applications (3 credits)

Prerequisite: INTE 290 or equivalent. This course introduces advanced uses of computer packages, including mail merge, electronic mail, file management, data communications. The format is self-instructional, using computer-based tutorial packages, videotapes, and text. A minimum of 40 hours of laboratory work is required.

INTE 293 Computer Application Development (3 credits)

This course introduces students to the use of contemporary computer tools in scientific applications. It is designed for students with some familiarity with the fundamentals of computing who wish to use computers as tools for research within science disciplines. The format is largely self-instructional, using computer-based tutorial packages. A minimum of 40 hours of laboratory work is required. NOTE: See §200.7 for equivalent statistics courses.

INTE 296 Discover Statistics (3 credits) This course introduces students to the basics of statistics and is aimed at mastering the elementary analytical concepts of the subject. Topics include descriptive statistics, correlation and regression analysis, experimental analysis (test procedures), probability (distribution and theory), hypothesis testing, and analysis of variance. NOTE: Students who have received credit for this topic under an INTE 298 number may not take this course for credit.

NOTE: See §200.7 for equivalent statistics courses.

INTE 298 Special Topics (3 credits)

INTE 299 Special Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INTE 333 (also listed as LUCC 333) Interdisciplinary Approaches to the Study of Peace (6 credits)

This course aims to introduce students to the

study of peace and enable them to think critically about contemporary circumstances that condition the search for peace. Using specific case studies and appropriate methodologies, the course examines the role of values, cultures, and ideologies in the attainment of peace. This course is presented in cooperation with the Loyola Peace Institute.

NOTE: Students who have received credit for INTE 499A or LUCC 333, 499A may not take this course for credit.

INTE 390 HIV/AIDS: Cultural, Social and Scientific Aspects of the Pandemic (6 credits)

An interdisciplinary survey of the major issues and challenges of the HIV pandemic. Such topics as the biology of the virus, therapeutic, clinical and epidemiological research developments, the social costs of sexual taboos and discrimination, and media and artistic representation by and of people with HIV are presented by faculty and visiting community experts. The epidemics in the Western hemisphere, Africa, Asia, and other regions are addressed. Learning is based on lectures, weekly tutorials, and community involvement.

INTE 391 (also listed as FASS 391) Issues in Sexuality Research (3 credits)

An interdisciplinary survey of approaches to research in sexuality within the humanities, the arts, and the social sciences. Basic concepts of sexual identity, values, conduct, representation, and politics are addressed through such topical concerns as pornography and censorship, and through the perennial dialogue between biological and socio-cultural models of sexuality. The relation between theories and research methods is discussed in the context of classical and current research and creative activity. The syllabus reflects the varying specializations of the instructors from year to year.

INTE 392 (also listed as FASS 392) Introduction to Queer Theory (3 credits)

An interdisciplinary survey of the basic post-1970 theories of sexual minorities and diversity, in their historical and cultural contexts. Authors from Michel Foucault to Eve Kosofsky Sedgwick are introduced, as well as the work of artists and performers from Derek Jarman to k.d. lang. The syllabus reflects the varying specializations of the instructors from year to year.

INTE 398 Special Topics (3 credits)

INTE 399 Special Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INTE 410 (also listed as LUCC 410) The Works of Bernard Lonergan (3 credits)

This course engages students in the task of integrating their specific fields of studies into the more general enterprise of human knowing and deciding. It reflects upon this experience with the aid of Bernard Lonergan's methodology. The texts are selected from the work of Lonergan. NOTE: Students who have received credit for LUCC 410 may not take this course for credit.

INTE 441 (also listed as LUCC 441) Issues in Contemporary Values (3 credits)

This course addresses central questions concerning what we love or detest, embrace or reject, prescribe or proscribe; what resources of human being, e.g. philosophical, psychological,

or artistic, are implicitly or explicitly drawn upon in these choices; whether the choices we make are mere "preferences", or have objective status as values; and how these questions relate to the problems of our culture and our time. Through alternating emphases and faculty, the focus is changed from time to time.

NOTE: Students who have received credit for INTE 440, LUCC 440 or 441 may not take this course for credit.

INTE 498 Special Topics (3 credits)

INTE 499 Special Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.180

JOURNALISM

Faculty

Director
ENN RAUDSEPP, Associate Professor

Diploma Programme Director LINDA KAY, Assistant Professor

Faculty
ROSS PERIGOE, Associate Professor
MICHAEL JOHN GASHER, Assistant Professor

Lecturer SHEILA ARNOPOULOS

Sessional Instructors
HUGH ANDERSON, Freelance Writer
BOB BABINSKI, CBC TV Sportscaster
PATCHEN BARSS, Freelance Writer
YVES BOISVERT, Journalist, La Presse
MICHAEL J. BRANSWELL, Journalist,
Canadian Press
ANN CARROLL, Journalist, The Gazette

ALAN CONTER, Producer, CBC Radio PETER COONEY, New Media, The Gazette MATTHEW FRIEDMAN, Freelance Writer LEONARD GERVAIS, Editor, Westmount KATHLEEN HUGESSEN, Freelance Writer BARRY LAZAR, Independent Film Maker JANET KASK, Freelance Journalist TRUDIE MASON, Program Host, CJAD Radio JACK ROMANELLI, Journalist, The Gazette KATHERINE SEDGWICK, Journalist, The Gazette ANDREA SHEPHERD, Pagination Systems Assistant, The Gazette MINKO SOTIRON, Writer and History Lecturer BERNARD ST-LAURENT, Journalist, CBC Radio News CAROLINE VAN VLAARDINGEN, Reporter, CFCF-TV News DAVID WATERS, Freelance Writer

Location

Loyola Campus Bryan Building, Room: BR 305-4 (514) 848-2465 E-Mail: sandy@vax2.concordia.ca

Department Objectives

Journalism studies are designed to help students become the intelligent and versatile reporters and writers upon which society depends for the exercise of its democratic functions. Above all, journalism is an intellectual activity with rigorous standards for gathering, processing, and disseminating information. To help students become knowledgeable and versatile reporters and writers, the Department of Journalism offers a professional education that combines theory and practice. Writing and production workshops emphasize the practical, simulating as much as possible the assignments of working journalists. Newsroom standards are universally applied. Complementing these courses are lectures and seminars which analyse the social and political contexts in which journalism is practised.

Admission and Graduation Requirements

Enrolment in the writing workshops in the Department of Journalism is limited and depends on the applicants' successful completion of the admission procedures outlined in the following paragraphs. All applicants should apply through the Office of the Registrar. In addition, they must submit a letter of intent and transcript to the Department of Journalism by March 1.

The letter of intent sent to the Department should be about 500 words and should describe the student's academic and work background and aspirations in journalism. Applicants must also contact the Department by March 1 to make an appointment for a test of English proficiency. Although it will not determine acceptance, applicants are advised that a working knowledge of French is important. A student must achieve a final mark of "C" or better in the reporting workshops in order to proceed to the next level.

To graduate with a Major or Specialization in Journalism, a student must demonstrate a working knowledge of French. Tests of oral and reading proficiency in French are administered by the Département d'études françaises on behalf of the Department of Journalism, which is responsible for the final evaluation of each student's competence.

Programmes

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value. These programmes are designed to prepare graduates for the English-language media.

BA Specialization in Journalism

NOTE: This Specialization allows students the fullest range of journalism courses and is intended to prepare students to work in all forms of modern journalism: radio, television, newspapers, magazines, and electronic publications.

- JOUR 201⁶, 202³, 203³, 205³
- JOUR 210³ or 215³
- JOUR 302³, 303³, 309³, 310³, 315³ JOUR 415³, 430³ JOUR 400³, 408³, 419³, 420³ 15
- 6
- 12
- Chosen from JOUR 4023, 4043, 4323
- 3 JOUR 3433 or 4423

BA Specialization in Communication and Journalism

NOTE: Students must meet the admission requirements of both the Departments of Communication Studies and Journalism.

Stage I

- JOUR 2016, 2033; COMS 2403, 2563
- Chosen from COMS 278³, 282³ Stages II & III
- Chosen from JOUR 205³, 215³
- JOUR 302³, 303³, 310³, 315³ 12
- Chosen from COMS 378⁶, 387⁶ 6
- JOUR 400³
- Chosen from JOUR 4023, 4043, 4083. 415³, 430³
- 15 Chosen from Communication Clusters III and IV at the 300 or 400 level.

42 **BA Major in Journalism**

- 15
- JOUR 201⁶, 202³, 203³, 205³ JOUR 302³, 303³, 309³, 310³, 315³ 15
- 3 **JOUR 400³**
- JOUR 4023 or 4043
- JOUR 408³ or 419³ 3
- Chosen from JOUR 4153, 4303, 4423 3

Courses

Written work in writing and reporting workshop courses is in English; please consult the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

JOUR 201 Writing and Reporting I

(6 credits)

Prerequisite: Enrolment in a Journalism programme. This course gives training in basic reporting and news writing. Students practise writing news and receive out-of-classroom assignments.

Introduction to Computer **JOUR 202** Applications in Journalism

(3 credits)

Prerequisite: JOUR 201 previously or concurrently. Students are introduced to the basics of computer-assisted reporting and desktop publishing.

JOUR 203 Introduction to Radio News (3 credits)

Prerequisite: JOUR 201 previously or concurrently. Students learn to write for newscasts and for longer broadcast formats. There are field assignments in interviewing, tape editing, and preparation for broadcast.

NOTE: Students who have received credit for JOUR 306 may not take this course for credit.

JOUR 205 History of Journalism (3 credits)

A history of the news media in the Englishspeaking world, starting with the government gazettes of seventeenth-century England and their illegal, underground competition, through the "news" papers of the eighteenth century, the rise of the yellow press, the human interest story, the penny press in the nineteenth century, down to today's corporate press. The course is designed to show that our expectations of the news media are not inherent in human nature, but are the result of historical processes that continue to evolve.

JOUR 210 The Media in Québec (3 credits)

This course studies the special characteristics of Québec media, focusing particularly on the historical development of Québec journalism and the part it has played in the shaping of modern Québec. Particular attention is given to the influence of journalists in cultural and political affairs. The recent increasing concentration of media ownership is examined. Much of the reading material is in French.

NOTE: Students who have received credit for JOUR 305 may not take this course for credit.

Contemporary News Media **JOUR 215** (3 credits)

This course introduces students to the increasingly complex structures of modern media. It examines the organizations, practices, and problems of news media, focusing on key functions in their day-to-day activities. In any given year, it may explore in detail a particular development or problem in the news media.

JOUR 298 Special Topics in Journalism (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

JOUR 302 Reporting Methods (3 credits)
Prerequisite: JOUR 201. This course builds
solid foundations for a variety of journalistic
assignments: feature writing, background and
in-depth reporting, analyses, and investigative
reporting. It is designed to help students
understand and master a variety of informationgathering techniques, and overcome some of
the hurdles confronting the contemporary
journalist. It covers: information sources,
interpretation and use of documents, access to
information, and reporting and interviewing
techniques to supplement official and
conventional information sources.

JOUR 303 Feature Writing (3 credits)
Prerequisite: JOUR 302. This course is designed to help students develop and enhance their writing abilities, preparing for the broadest range of journalistic feature writing, from brief colour stories and profiles to in-depth articles. It consolidates interviewing techniques and introduces a variety of writing approaches.
Students will be building the final foundations for a full spectrum of print-oriented writing assignments, preparing for advanced reporting work and the demands of specialized journalism.

JOUR 309 Principles of Editing (3 credits)
Prerequisite: JOUR 201. Through lectures and
workshops, students are introduced to the art of
story editing. While the material used is designed
primarily for print production, the techniques, and
particularly the intellectual processes employed,
are applicable to all media.

NOTE: Students who have received credit for JOUR 410 may not take this course for credit.

JOUR 310 The Press and the Law (3 credits)

Prerequisite: JOUR 201, or permission of the director. Lectures cover those aspects of criminal and civil law which bear most directly on the work of professional journalists — libel, slander, contempt of court.

NOTE: Students who have received credit for JOUR 405 may not take this course for credit.

JOUR 315 Ethics and Responsibility in Journalism (3 credits)

Prerequisite: JOUR 201, or permission of the director. This course considers journalism in the context of philosophical and ethical principles. It aims to assess realistically the responsibilities of reporting and news analysis and to examine critically the role of journalism in society.

NOTE: Students who have received credit for JOUR 446 may not take this course for credit.

JOUR 343 Broadcast Public Affairs (3 credits)

Prerequisite: JOUR 201, or permission of the director. This course focuses on the principles, practices, and debates in Canadian public affairs radio and television. American broadcasting is also considered. The course also examines current affairs broadcasting in the

world community.

NOTE: Students who have received credit for COMS 340, 342 or 343 may not take this course for credit.

JOUR 398 Special Topics in Journalism (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

JOUR 400 Advanced Reporting (3 credits) Prerequisite: JOUR 303. Students are introduced to several areas of specialist reporting — economics and business, public affairs, medicine and science, the arts, etc. — and to a variety of journalistic treatments: background, interpretive, and investigative reporting.

NOTE: Students who have received credit for JOUR 401 may not take this course for credit.

JOUR 402 Specialist Reporting (3 credits)
Prerequisite: JOUR 400. Students cover a beat in the field of their choice for several weeks, producing news, features, and background stories. A term-end major background story is also produced. There are seminars and discussions, with leaders from the media on the specifics of beat coverage and on general media topics, such as trade unionism, ethics, journalistic responsibility.

JOUR 404 Magazine Writing (3 credits)
Prerequisite: JOUR 400 and a qualifying
assignment. This is a workshop for students
who intend to write in the burgeoning magazine
field. Students develop and apply the techniques
used in a variety of magazine formats, from the
highly specialized to the general: news magazines, special interest, topical or industrial
publications, expansive feature formats, and
internal corporate publications. It is of particular
interest to students wishing a freelance career.

JOUR 408 Advanced Publication Workshop (3 credits)

Prerequisite: JOUR 202. Students experiment, under supervision, with concepts and practical applications of computerized print media layout and design at an advanced level while creating publications in a variety of formats.

NOTE: Students who have received credit for JOUR 498H may not take this course for credit.

JOUR 415 *Television News* (3 credits)
Prerequisite: JOUR 203. This course introduces students to the preparation of news for television. Classes and field assignments cover writing, interviewing, and editing of videotape for short television newscast items and for longer news feature formats.

JOUR 419 Advanced Computer-Assisted Reporting (3 credits)

Prerequisite: JOUR 202, or permission of the

director. Students develop advanced skills in computer-assisted reporting, working with a variety of software and data storage systems to research, analyse and publish their work. The goal is to equip students with the skills necessary to be successful journalists in the information age.

NOTE: Students who have received credit for JOUR 498J may not take this course for credit.

JOUR 420 Advanced Television Journalism (3 credits)

Prerequisite: JOUR 415 and permission of the Department. An advanced workshop in television journalism, working in the areas of news and current affairs programming. Emphasis on editorial control and journalistic treatment of subjects. Weekly critiques by professor and invited guests.

JOUR 430 Advanced Radio Journalism (3 credits)

Prerequisite: JOUR 203 and permission of the Department. This workshop concentrates on the production of daily news for live broadcast. Students function as reporters, assignment editors, and news readers. Critiques are given by the instructor and invited radio journalists.

JOUR 432 Public Affairs Workshop in Broadcast Journalism

(3 credits)

Prerequisite: JOUR 420 or 430. This workshop is intended for students in either radio or television who wish to perfect their skills in news magazine or long format public affairs broadcasting. Students propose their own story ideas and work independently under the guidance and supervision of the instructor.

JOUR 440 Seminar in Modern Journalism (3 credits)

Prerequisite: Third-year standing in a Journalism programme. This course takes an intensive look at selected aspects of modern journalistic practice. The focus for this course may change from year to year.

JOUR 442 Seminar in International Journalism (3 credits)

Prerequisite: Third-year standing in a Journalism programme. This course examines journalism and news media practices around the world. The focus of the course may change from year to year, to study in depth a selected country, or tradition.

JOUR 450 Independent Study (3 credits) Prerequisite: Enrolment in a Journalism programme. Students who have demonstrated ability may, near the end of their programme, be allowed to undertake independent study, in either research or production, in an area of special interest in Journalism. The study or project is done in close collaboration with one or more members of the faculty.

JOUR 451 *Independent Study* (3 credits)
Prerequisite: Enrolment in a Journalism
programme. Students who have received credit
for JOUR 450 may register for JOUR 451.

JOUR 498 Advanced Special Topics in Journalism (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.190

LIBRARY STUDIES

Director

JOANNE LOCKE, Associate Professor

Location

Sir George Williams Campus J.W. McConnell Building, Room: LB 579 (514) 848-2528

Department Objectives

The overall objective of the Library Studies programme is to provide strong undergraduate and graduate programmes which prepare students for paraprofessional work in the field of library/information studies and/or further study in other areas.

The use of computers is integrated throughout the curriculum, and classes are scheduled in a variety of Concordia University Computing Centre labs including the MAC lab and the PC labs. For the majority of courses, students are required to use the Concordia University libraries extensively. Through its programmes, Library Studies works to meet the needs of the library/information community by offering university-educated individuals for employment in the field, as paraprofessionals, thus filling the gap between the library clerk and the professional librarian.

Programmes

Beginning January 1, 1997, no new students will be admitted into Library Studies programmes. Courses will continue to be scheduled to meet the needs of students in the programmes.

Students are required to complete the appropriate entrance profile for entry into the programme (see §31.002 — Programmes and Admission Requirements — Profiles).

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

36 BA Major in Library Studies

- 3 LIBS 205³
- 15 LIBS 303³, 305³, 320³, 322³, 323³
- 12 LIBS 350³, 355³, 410³, 495³
- 6 LIBS electives in consultation with the programme adviser

60 Certificate in Library Studies

- 30 LIBS 205³, 303³, 305³, 320³, 322³, 323³, 350³, 355³, 410³, 495³
- 6 LIBS electives in consultation with the programme adviser
- 24 Electives

NOTE: All Library Studies students must take LIBS 205 as a prerequisite to all other Library Studies courses, the only exceptions being LIBS 411, 433 and 461.

The Library Studies programme offers a *Major in Library Studies* to those who wish to pursue a career in library work at a non-graduate level. For those interested in taking advanced studies in any subject area including library and/or information science/studies at the graduate level, consultation with an adviser at the beginning of the programme is recommended.

The Certificate in Library Studies is offered to meet the needs of students who may not wish to fulfil the requirements of an undergraduate degree. Sixty (60) credits are required to complete the Certificate programme, 36 of which consist of Library Studies, with 24 credits of electives. Students may transfer into the Certificate programme credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Diploma in Library Studies

The Department also offers a Diploma programme for students who have completed their undergraduate degree in another field. Detailed information on the programme is given in the School of Graduate Studies Calendar.

Prerequisites To All Other Courses

LIBS 205 Introduction to Library Services (3 credits)

Required Courses

LIBS 303 Information Services (3 credits)
LIBS 305 Bibliographic Searching (3 credits)

LIBS 320	Cataloguing (3 credits)		
LIBS 322	Subject Access and Classification I (3 credits)		
LIBS 323	Subject Access and Classification II (3 credits)		
LIBS 350	Automated Library Systems I (3 credits)		
LIBS 355	Automated Library Systems I (3 credits) Automated Library Systems II (3 credits)		
LIBS 410	On-line Information Retrieval (3 credits)		
= 1 .1			
Electives	• • • • • • • • • • • • • • • • • • •		
LIBS 298	Selected Topics in Library Studies (3 credits)		
LIBS 299	Selected Topics in Library Studies (6 credits)		
LIBS 398	Selected Topics in Library Studies (3 credits)		
LIBS 399	Selected Topics in Library Studies (6 credits)		
LIBS 407	Research Methodology (3 credits)		
LIBS 409	Library Research and Library Resources in Science and Technology (3 credits)		
LIBS 411	Library Service and Work with Children (3 credits)		
LIBS 421	School Library Services, Collections and Programmes (3 credits)		
LIBS 432	Library Service and Work in the College and University (3 credits)		
LIBS 433	Technical Skills in Multi-Media Operations (3 credits)		
LIBS 435	Organization of Audio-Visual Collections (3 credits)		
LIBS 441	Library Service and Work in Business and Industry (3 credits)		
LIBS 451	Library Service and Work in the Public Library (3 credits)		
LIBS 461	Library Service and Work with the Young Adult (3 credits)		
LIBS 498	Advanced Topics in Library Studies (3 credits)		
LIBS 499	Advanced Topics in Library Studies (6 credits)		
	. , , , ,		
Final Bassinad Course			

Final Required Course

LIBS 495 Field Practice (3 credits)

Electives Open to Non-Library Studies Students Only

INST 250 Introduction to Library Research Practices (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LIBS 303 Information Services (3 credits) Prerequisite: LIBS 205. This course examines the theories and principles of information services and literature searching. Standard general reference works are studied.

LIBS 305 Bibliographic Searching (3 credits)

Prerequisite: LIBS 205. This course examines the theories and principles of reference work and provides a broad introduction to bibliographic searching. General and subject bibliographies, indexes and abstracts are examined and evaluated.

LIBS 322 Subject Access and Classification I (3 credits)

Prerequisite: LIBS 320. This course is designed to give the student, who is knowledgeable concerning descriptive cataloguing and MARC format, a basic knowledge of subject cataloguing and classification. Emphasis is placed on Sears List of Subject Headings and the Dewey Decimal Classification Scheme.

NOTE: Students who have received credit for LIBS 324 may not take this course for credit.

LIBS 323 Subject Access and Classification II (3 credits)

Prerequisite: LIBS 320. This course is designed to give the student, who is knowledgeable

concerning descriptive cataloguing and MARC format, a basic knowledge of subject cataloguing and classification. Emphasis is placed on the Library of Congress Subject Headings and the Library of Congress Classification Scheme. NOTE: Students who have received credit for LIBS 324 may not take this course for credit.

LIBS 398 Selected Topics in Library Studies (3 credits)

LIBS 399 Selected Topics in Library Studies (6 credits)

Specific topics for these courses will be stated in the Undergraduate Class Schedule. Prerequisites relevant in each case to be discussed with the academic adviser.

LIBS 409 Library Research and Library Resources in Science and Technology (3 credits)

Prerequisite: LIBS 205; or enrolment in Engineering or in a Major in Science. The course is designed to introduce Science and Engineering undergraduates, as well as the Library Studies student, to the structure of scientific literature, to the basic types of information sources in science and technology, and to information networks, and computer-based retrieval systems. The student also

becomes familiar with search strategies and indexing techniques. Emphasis is placed on developing skills in the student's particular discipline or interest.

LIBS 410 On-line Information Retrieval (3 credits)

Prerequisite: LIBS 305. A theoretical and practical introduction to the operation and use of on-line information retrieval systems. Emphasis is on database file structure, search protocol, Boolean logic, vocabulary control, and search strategy development in relation to searching bibliographic and full text databases.

LIBS 411 Library Service and Work with Children (3 credits)

The course is designed to introduce the student to the major genres of children's literature. The student examines the methods used in the library to stimulate the child's love of reading and evaluates children's literature through assignments, films, and a field trip to a children's library.

LIBS 421 School Library Services, Collections and Programmes (3 credits)

Prerequisite: LIBS 205. The duties and responsibilities of the library assistant, library technician and teacher-librarian are discussed. Topics include programmes for teaching the use of the library, methods for cooperating with teachers, the assembling of materials for instructional units, responding to curriculum

demands upon the library, and examining the effects of new curriculum trends in education upon the school library/resource centre.

LIBS 461 Library Service and Work with the Young Adult (3 credits)

This course explores through books the major phenomena of the teenager's world. Some of the skills needed to serve young adults in a library setting are examined. Literature written especially for young adults, and some adult literature which is especially popular with, and suitable for, young people, is studied. A pre-course reading list is available.

LIBS 495 Field Practice (3 credits)

Prerequisite: Completion of all other required Library Studies courses. In consultation with the appropriate supervising librarian, the student is placed in a local library system other than the library in which the student is employed. The duration of the field practice is five weeks. Field practice includes a wide variety of library tasks. In addition the student is required to complete a written research project on a topic approved by the professor.

LIBS 498 Advanced Topics in Library Studies (3 credits)

Specific topics for these courses will be stated in the Undergraduate Class Schedule. Prerequisites relevant in each case to be discussed with the academic adviser.

31.200 MATHEMATICS AND STATISTICS

Faculty

JOEL HILLEL, Professor

Professor Emeritus DAVID WHEELER

Professors SYED T. ALI

ABRAHAM J. BOYARSKY WILLIAM P. BYERS YOGENDRA P. CHAUBEY RICHARD L. HALL JOHN HARNAD **ZOHEL KHALIL** HERSHY KISILEVSKY HARALD W. PROPPE ROBERT RAPHAEL

TARIQ N. SRIVASTAVA RONALD J. STERN MANFRED E. SZABO

ANNA SIERPINSKA

Professor of Mathematics and Computer

JOHN McKAY

Associate Professors JOSEF BRODY G. ELIE COHEN

CHRISTOPHER J. CUMMINS

CHANTAL DAVID JOSÉ GARRIDO PAWEL GORA JAMES C. HAYES ATTILA KEVICZKY

FRANCISCO THAINE-PRADA

Assistant Professors ANGELO J. CANTY VINCENT GOULET DMITRI KOROTKIN

Location

Lovola Campus

Hingston Hall B, Room: HB 234

(514) 848-3232

Sir George Williams Campus

J.W. McConnell Building, Room: LB 525

(514) 848-3223

Department Objectives

The Department of Mathematics and Statistics provides the general mathematical culture necessary for training those who will either be using the tools of mathematics or statistics in their work or who will become future mathematicians or statisticians. For students who are contemplating graduate work in mathematics or statistics, the Department has leading researchers in the fields of Actuarial Mathematics, Applied Probability, Computational Algebra, Differential Geometry, Dynamical Systems, Mathematical Physics, Mathematics Education, Number Theory and Statistics.

In addition to its co-op programme, alternating Work and Academic terms, the Department offers a programme in Actuarial Mathematics and prepares students for the associateship examinations of the Society of Actuaries and the Casualty Actuarial Society.

The Department also provides instruction at the remedial and introductory levels to enable students who have been out of school for some time to re-enter the academic stream; and offers special courses for teachers of mathematics who wish to keep abreast of recent ideas and applications.

Programmes

Students are required to complete the appropriate entrance profile for entry into the programme (see §31.002 — Programmes and Admission Requirements — Profiles).

A student wishing to follow a programme in the Department of Mathematics and Statistics but not meeting the entrance requirements should consult with one of the Department's academic advisers. By careful choice of electives, students can select whether the emphasis of the programme will be in the area of Actuarial Mathematics, Pure and Applied Mathematics, or Statistics through Specialization/ Honours programmes in the respective areas.

The enrolment in Specialization/Honours will be on a selective basis, whereas the Major will be open to all students. However, students with less than a 70% average in cégep Mathematics courses will be required to take a six-credit "transition" Calculus and Linear Algebra course (MAST 214) upon entry into the MATH/STAT Major. The course will not count for credits in the Major.

Students in a Mathematics and Statistics programme may not take any of the following courses for credit: EMAT 212, 232, 252, 271. Students wishing to take other Engineering Mathematics courses for credit must obtain prior approval of the Department.

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

BA or BSc Honours in Actuarial Mathematics

- MATH 244³, 245³, 251³, 252³, 344³, 345³, 354³, 361³, STAT 249³, 250³ ACTU 256³, 257³, 357³, 457³, STAT 349³, 360³, 460³, 461³ 30
- Chosen from ACTU 2861; MATH 2881, 1 289¹: STAT 287¹
- 2 Chosen from ACTU 386², 486²; MATH 387²; STAT 388²
- MATH/STAT/ACTU chosen with prior departmental approval
- Honours project ACTU 493

BA or BSc Specialization in Actuarial **Mathematics**

- MATH 244³, 245³, 251³, 252³, 344³, 345³, 354³, 361³; STAT 249³, 250³
- 24 ACTU 256³, 257³, 357³, 457³; STAT 349³, 360³, 460³, 461³
- Chosen from ACTU 286¹; MATH 288¹, 2891; STAT 2871
- Chosen from ACTU 386², 486²; MATH 3872; STAT 3882
- MATH/STAT/ACTU chosen with prior departmental approval

66 BA or BSc Honours in Pure and Applied Mathematics

- MATH 244³, 245³, 251³, 252³, 344³, 345³, 354³, 361³; STAT 249³, 250³
- 12 MATH 366³, 369³, 464³, 467³
- 6 Chosen from MATH 470³ and 471³, 474³ and 475³, 478³ and 479³; STAT 449³ and 452³
- Chosen from ACTU 2861; MATH 2881, 2891; STAT 2871
- Chosen from ACTU 386², 486²; MATH 387²; STAT 388²
- MATH/STAT chosen with prior departmental approval
- Honours project MATH 496 6

BA or BSc Specialization in Pure and **Applied Mathematics**

- MATH 244³, 245³, 251³, 252³, 344³, 345³, 354³, 361³, STAT 249³, 250³ MATH 366³, 369³, 464³, 467³
- Chosen from MATH 470³ and 471³, 474³ and 4753, 4783 and 4793; STAT 4493 and 452^{3}
- Chosen from ACTU 286¹; MATH 288¹, 289¹; STAT 287¹

- 2 Chosen from ACTU 386², 486²; MATH 3872; STAT 3882
- MATH/STAT chosen with prior departmental approval

BA or BSc Honours in Statistics 66

- MATH 244³, 245³, 251³, 252³, 344³, 345³, 354³, 361³; STAT 249³, 250³
- 12 MATH 366³; STAT 349³, 360³, 450³
- 6 Chosen from MATH 4643 and 4673, 4783 and 479³; STAT 449³ and 452³, 460³ and 4613
- Chosen from ACTU 2861; MATH 2881, 2891; STAT 2871
- Chosen from ACTU 386², 486²; MATH 387²; STAT 388²
- MATH/STAT chosen with prior departmental approval
- 6 Honours project STAT 499

60 BA or BSc Specialization in Statistics

- MATH 244³, 245³, 251³, 252³, 344³, 345³, 354³, 361³; STAT 249³, 250³ 30
- 12 MATH 366³; STAT 349³, 360³, 450³
- Chosen from MATH 464³ and 467³, 478³ and 479³; STAT 449³ and 452³, 460³ and 4613
- Chosen from ACTU 286¹; MATH 288¹, 2891; STAT 287
- Chosen from ACTU 386², 486²; MATH 3872; STAT 3882
- MATH/STAT chosen with prior departmental approval

42 BA or BSc Major in Mathematics and **Statistics**

- COMP 248³; MAST 217³ or COMP 238³; MAST 218³, 219³, 221³, 223³, 224³, 234³, 235³, 331³, 332³
- Chosen from MAST 3333, 3343, 3353, 3973, 3983; MATH 3703
- Chosen with prior departmental approval*

*NOTE: This category may also include any other courses in the MATH/STAT/ACTU discipline, with proper prerequisites.

Minor in Mathematics and Statistics

- MAST 217³, 218³, 219³, 221³, 223³, 224³ 18
- MATH/STAT chosen with prior departmental approval from MAST 2343, 235³, 330³, 331³, 332³, 333³, 334³, 335³, 397³, 398³

MATHEMATICS AND STATISTICS CO-OPERATIVE PROGRAMME

Mathematics and Statistics Co-operative Programme

Director MANFRED E. SZABO, Professor

The Mathematics and Statistics Co-operative programme is offered to students who are enrolled in the BA or BSc Honours or Specialization programmes. Students interested in applying for the Mathematics and Statistics co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Mathematics and Statistics co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Actuarial Mathematics

ACTU 256 Mathematics of Finance (3 credits)

Prerequisite: MATH 244 previously or concurrently; and permission of the Department. Measurement of interest; annuities and perpetuities; amortization and sinking funds; rates of return; bonds and related securities; life insurance. NOTE: Students who have received credit for MATH 326 may not take this course for credit.

ACTU 257 Actuarial Mathematics I (3 credits)

Prerequisite: ACTU 256. Measurement of mortality; survival function, mortality tables, force of mortality; special topics.

NOTE: Students who have received credit for MATH 327 may not take this course for credit.

ACTU 286 Actuarial Mathematics Lab I (1 credit)

This lab will feature problem-solving sessions for the general Mathematics examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 229 may not take this course for credit.

ACTU 357 Actuarial Mathematics II (3 credits)

Prerequisite: ACTU 257. Life annuities; pure endowments, annual payments, continuous annuities, net annual premium, net level premium reserves; the expense factor; special topics. NOTE: Students who have received credit for MATH 427 may not take this course for credit.

ACTU 386 Actuarial Mathematics Lab II (2 credits)

This lab will feature the use of the language APL or other suitable computer software for actuarial students.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

ACTU 456 Pension Mathematics (3 credits)

Prerequisite: ACTU 357. Valuation methods; gains and losses; dynamic control; special topics.

ACTU 457 *Risk Theory* (3 credits)
Prerequisite: ACTU 257. Applications of contingency theory in life and health insurance,

annuities and pension; individual risk theory, ruin theory.

NOTE: Students who have received credit for MATH 428 may not take this course for credit.

ACTU 458 Credibility Theory (3 credits) Prerequisite: ACTU 357; STAT 349 previously or concurrently. Credibility approach to inference for heterogeneous data; classical, regression and Bayesian models; illustrations with insurance data.

ACTU 459 Loss Distributions (3 credits)
Prerequisite: ACTU 357; STAT 360. Probability
model fitting to loss data; estimation and testing
under variety of procedures and sampling
designs.

ACTU 486 Actuarial Mathematics Lab III (2 credits)

This lab is a workshop designed to prepare students for the Actuarial Mathematics examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 429 may not take this course for credit.

ACTU 491 Topics in Actuarial Mathematics (3 credits)

ACTU 492 Reading Course in Actuarial Mathematics (3 credits)

ACTU 493 Honours Project in Actuarial Mathematics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Mathematics and Statistics

MAST 214 Calculus and Linear Algebra (6 credits)

Prerequisite: Cégep Mathematics 105, 203. Functions; maxima and minima. Velocity and acceleration. Iterative solution of equations, parametric equation of curves. Integrals; change of variables, integration by parts, double integrals, numerical integration. Conic sections. Matrices, determinants, eigenvalues, eigenvectors, system of equations. Series and their convergence.

274 . MATHEMATICS AND STATISTICS

Introduction to vector space and complex numbers. Word problems.

NOTE: This course can be counted as an elective towards a 90-credit degree programme. It must be taken, upon entry, by newly admitted students in the MATH/STAT Major who have less than 70% average in cégep Mathematics courses.

MAST 217 Introduction to Mathematical Thinking (3 credits)

This course aims to foster analytical thinking through a problem-solving approach. Topics include construction of proofs, number systems, ordinality and cardinality, role of examples and counter examples, role of generalizations and specializations; role of symbols, notations and definitions; styles of mathematical discourse. NOTE: Students who have received credit for MATH 216 may not take this course for credit. NOTE: Only three credits will be awarded from MAST 217; COMP 238.

NOTE: This course cannot be taken for credit by students in the Specialization/Honours stream.

MAST 218 Multivariable Calculus I (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Vector geometry; lines and planes; curves in Rⁿ; vector functions; vector differential calculus; extrema and Lagrange multipliers. Introduction to multiple integrals and coordinate transformations. Problem solving with MAPLE. NOTE: Students who have received credit for MATH 262 may not take this course for credit.

MAST 219 Multivariable Calculus II (3 credits)

Prerequisite: MAST 218 or equivalent. Vector integral calculus; line and surface integrals; Green's, Stokes' and Gauss' theorems; coordinate transformations and Jacobians. Power series, applications. Problem solving with MAPLE. NOTE: Students who have received credit for MATH 263 may not take this course for credit.

MAST 221 Applied Probability (3 credits)
Prerequisite: Cégep Mathematics 105, 203 or
equivalent. Counting rules, discrete probability
distributions; random sampling; conditional
probability; means and variances, normal and
other continuous sampling distributions.
Applications. Use of MINITAB and/or SYSTAT.
NOTE: Students who have received credit for
MATH 242 may not take this course for credit.

MAST 223 Introduction to Stochastic Methods of Operations Research (3 credits)

Prerequisite: MAST 221 or equivalent. Markov chains; queuing theory; inventory theory; Markov decision processes; applications to reliablity. NOTE: Students who have received credit for MATH 337 may not take this course for credit.

MAST 224 Introduction to Optimization (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or

equivalent. Introduction to the theory of optimization; linear programming; the simplex method; duality and transportation problem. Introduction to graphs and networks; applications. Use of computing softwares.

NOTE: Students who have received credit for MATH 231 may not take this course for credit.

MAST 234 Linear Algebra and Applications I (3 credits)

Prerequisite: Cégep Mathematics 105 or equivalent; MAST 217 previously or concurrently. System of linear equations, matrix operations, echelon forms and LU-factorization; Rⁿ: subspaces, linear dependence, basis, dimension, matrix transformations; eigenvalues and eigenvectors in Rⁿ and applications (e.g. Markov chains, dynamical systems). The software MAPLE will be extensively used.

NOTE: Students who have received credit for MATH 251, 282 or ECON 325 may not take this course for credit.

MAST 235 Linear Algebra and Applications II (3 credits)

Prerequisite: MAST 234 or equivalent. Rⁿ: Orthogonality, projections, Gram-Schmidt method and QR-factorization; applications to least square methods (data fitting, inconsistent systems). Symmetric matrices, principal axes theorem and applications. Special topics (e.g. coding theory, differential equations, error analysis). The software MAPLE will be extensively used.

NOTE: Students who have received credit for MATH 252 or 283 may not take this course for credit.

MAST 330 Differential Equations

(3 credits)

Prerequisite: MAST 218 or equivalent. First order differential equations; second order differential equations; Laplace transform methods; mathematical models and numerical methods. NOTE: Students who have received credit for MATH 271 may not take this course for credit.

MAST 331 Mathematical Modelling (3 credits)

Prerequisite: MAST 221, 224 previously or concurrently, 234, 330 or equivalent. Introduction to mathematical modelling; predator-prey models in biology, game theory, decision analysis, stability theory; modelling electric circuits.

MAST 332 Techniques in Symbolic Computation (3 credits)

Prerequisite: MAST 217 or COMP 238; MAST 234 or COMP 248. This course is an application-oriented introduction to symbolic computation, as it applies to algebra, number theory and combinatorics covering the following topics: capabilities of symbolic systems (e.g. MAPLE), modular methods, arithmetic mod p, arithmetic mod m, matrices mod p, Chinese remainder theorem, polynomial factorization mod p. Applications to coding theory and cryptography. Combinatorial algorithms. NOTE: Students who have received credit for MATH 232 or COMP 367 or 467 may not take this course for credit.

Applied Statistics (3 credits) **MAST 333** Prerequisite: MAST 221 or equivalent; MAST 332 or equivalent. Graphical and numerical descriptive methods; Estimation and hypothesis testing; linear regression and correlation; one way ANOVA; contingency and goodness of fit tests. Use of statistical software, e.g. MINITAB or SYSTAT. NOTE: Students who have received credit for MATH 243 may not take this course for credit.

Numerical Analysis (3 credits) Prerequisite: MAST 218 or equivalent; MAST 235 previously or concurrently; MAST 332 or equivalent. Introduction to computing softwares: numerical solution of non-linear equations; interpolations and approximations; quadrature and numerical integration.

NOTE: Students who have received credit for MATH 311 may not take this course for credit.

MAST 335 Investment Mathematics (3 credits)

Prerequisite: MAST 218 or equivalent. Simple and compound interest; annuities; amortization and sinking funds; mortgage schemes; bonds and related securities; capital cost and depletion; spread-sheet implementation. NOTE: Students who have received credit for MATH 225 may not take this course for credit.

MAST 397 Topics in Mathematics and Statistics (3 credits)

MAST 398 Reading Course in Mathematics and Statistics (3 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be

stated in the Undergraduate Class Schedule.

Mathematics

MATH 200 Fundamental Concepts of Algebra (3 credits)

This course is designed to give students the background necessary for MATH 201. Some previous exposure to algebra is assumed. Sets, algebraic techniques, inequalities, graphs of equations.

NOTE: Students who have received credit or exemption for MATH 201 or equivalent may not take this course for credit.

NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 201 Elementary Functions (3 credits)

Sets, inequalities, graphs of functions, and

relations. Trigonometric, exponential, and logarithmic functions. Lectures and laboratory. NOTE: Students who have received credit or exemption for MATH 203 or equivalent, or for a course having MATH 203 or equivalent in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 202 College Algebra (3 credits) Prerequisite: MATH 201 or equivalent. Progressions, combinations, permutations, binomial theorem, mathematical induction, inequalities, polynomials, cartesian and polar forms of complex numbers, conics.

NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 203 Differential and Integral Calculus I (3 credits)

Prerequisite: MATH 201 or equivalent. Functional notation. Differentiation of polynomials. The power, product, quotient, and chain rules. Differentiation of elementary functions. Implicit differentiation. Higher derivatives. Maxima and minima. Applications: tangents to plane curves, graphing, related rates. Approximations using the differential. Antiderivatives, definite integrals, area. Lectures and laboratory.

NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 204 Vectors and Matrices (3 credits)

Prerequisite: MATH 201 or equivalent. Algebra and geometry of vectors, dot and cross products, lines and planes. System of equations, operations on matrices, rank, inverse, quadratic form, and rotation of axes.

NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 205 Differential and Integral Calculus II (3 credits)

Prerequisite: MATH 203. Techniques of integration: substitutions, integration by parts, partial fractions. Improper integrals. Physical applications of the definite integral. Infinite series: tests for convergence. Power series, Taylor's theorem. Lectures and laboratory. NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 206 Algebra and Functions

(3 credits)

Coordinate systems. Radicals and distance formula. Polynomials, factoring, and graphing. Relations and functions. Linear and quadratic functions, equations, and systems. Exponents, exponential and logarithmic functions and equations.

NOTE: Students who have received credit or exemption for a course at the level of MATH 201 or above may not take this course for credit. NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 208 Fundamental Mathematics I (3 credits)

Prerequisite: MATH 206 or equivalent. This course is a prerequisite course for Commerce and Administration students*. Matrices, Gaussian elimination, input-output analysis. progressions, compound interest, annuities, permutations and combinations, probability, binomial theorem, exponential and logarithmic functions, inequalities, linear programming. *NOTE: See §14.4.2 (Mature Entry) and 61.20 (Extended Credit).

NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 209 Fundamental Mathematics II (3 credits)

Prerequisite: MATH 206 or equivalent. This course is a prerequisite course for Commerce and Administration students*. Limits; differentiation of rational, exponential, and logarithmic functions; theory of maxima and minima; integration.

*NOTE: See §14.4.2 (Mature Entry) and 61.20 (Extended Credit).

NOTE: Students who have received credit or exemption for MATH 203 or equivalent may not take this course for credit.

NOTE: Students in programmes leading to the BSc degree or the BA programmes in Mathematics and Statistics may not take this course for credit to be applied to their programme of concentration.

MATH 211 was offered in 1996-97. For a description of this course, please see the 1996-97 Undergraduate Calendar.

MATH 215 Ideas in Mathematics (3 credits) Mathematical ideas and techniques permeate Western civilization, but because mathematics operates at a high level of abstraction and uses

an esoteric language, its contribution is not well understood. Avoiding mathematical technicalities as much as possible, this course attempts to demonstrate a few of the powerful ideas that have animated the development of mathematics. Examples of mathematical thinking from various periods of mathematical history are examined and related to their scientific and social impact. NOTE: This course is designed as a suitable elective for students following an undergraduate programme. It has no formal prerequisites and will not qualify students to enrol for any other Mathematics course, and cannot be used to satisfy a Mathematics requirement in any BSc or BA programme.

NOTE: Students who have received credit for INTE 215 may not take this course for credit.

MATH 220 Mathematical Methods in Chemistry (3 credits)

Prerequisite: Cégep Mathematics 203 or MATH 205. Partial derivatives. First-order differential equations (first- and second-order chemical reactions). Hermite, Laguerre, and Legendre equations. Solutions by power series. Eigenfunctions and eigenvalues, Sturm-Liouville theory.

MATH 244 Analysis I (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Mathematical rigour: proofs and counter-examples; quantifiers; number systems; Cardinality, decimal representation, density of the rationals, least upper bound. Sequences and series; review of functions, limits and continuity.

NOTE: Students who have received credit for MATH 362 may not take this course for credit.

MATH 245 Analysis II (3 credits)

Prerequisite: MATH 244 or equivalent. Connectedness and compactness in the reals. Intermediate value theorem; extreme values for continuous functions. Differential and integral calculus; fundamental theorem of calculus; power series.

NOTE: Students who have received credit for MATH 363 may not take this course for credit.

Linear Algebra I (3 credits) **MATH 251**

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Matrices and linear equations; vector spaces; bases, dimension and rank; linear mappings and algebra of linear operators; matrix representation of linear operators; determinants; eigenvalues and eigenvectors; diagonalization. NOTE: Students who have received credit for MAST 234, MATH 282 or ECON 325 may not take this course for credit.

Linear Algebra II (3 credits) **MATH 252** Prerequisite: MATH 251 or equivalent. Characteristic and minimum polynomials; invariant subspaces, invariant direct sums; nilpotent operators, Jordan canonical form; cyclic subspaces; rational canonical form; bilinear and quadratic forms; inner product; orthogonality; adjoint operators and orthogonal operators. NOTE: Students who have received credit for MAST 235 or MATH 283 may not take this course for credit.

MATH 288 Mathematics Lab I (1 credit) This lab will be associated with MATH 244 and 245.

MATH 289 Mathematics Lab II (1 credit) This lab will be associated with MATH 251 and

MATH 334 Combinatorics (3 credits) Prerequisite: Eighteen credits in post-cégep Mathematics. General principle of counting, permutations, combinations, identities, generating functions; Fibonacci numbers; partitions, recurrence relations, Stirling numbers, Catalan numbers, principle of inclusion-exclusion, cycles of a permutation, orbits of permutation groups. parity of a permutation, Polya's theorem.

Analysis III (3 credits) **MATH 344**

Prerequisite: MATH 245 or equivalent. Sequences and series of functions, including uniform convergence of functions. Multivariable calculus; the derivative as a linear approximation. Matrix representation; gradients, chain rule, tangent space and mean value theorems; maxima and minima including Lagrange multipliers; inverse and implicit function theorem.

Analysis IV (3 credits) **MATH 345** Prerequisite: MATH 344 or equivalent. Multiple integrals; integrals over region in Rn; curves and surfaces, including parametric representations; a short introduction to manifolds in Rⁿ; integrals on surfaces, versions of Stokes' theorem.

Linear Algebra III (3 credits) **MATH 352** Prerequisite: MATH 252. Matrices, linear transformations, determinants, metric concepts, inner-product spaces, dual spaces, spectral theorem, bilinear and quadratic forms, canonical forms for linear transformation, matrix functions, selected topics.

NOTE: Students who have received credit for MATH 381 may not take this course for credit.

Numerical Analysis (3 credits) Prerequisite: MATH 245; MATH 387 or equivalent, previously or concurrently. Error analysis in numerical algorithms; solution of non-linear equations; fixed point iterations, rate of convergence. Interpolations and approximations, Legendre polynomials. Numerical integration and quadrature.

NOTE: Students who have received credit for MATH 311 may not take this course for credit.

MATH 361 Operations Research I (3 credits)

Prerequisite: MATH 251 or equivalent. Introduction to the theory of optimization; linear programming, simplex method; revised simplex method; transport and assignment problems; integer programming; introduction to graphs and networks.

NOTE: Students who have received credit for MATH 231 may not take this course for credit.

Complex Analysis I (3 credits) Prerequisite: MATH 344 or equivalent. Algebra and geometry of complex numbers, linear transformations, analytic functions, Laurent's series, calculus of residues, special functions.

MATH 369 Abstract Algebra I (3 credits) Prerequisite: Twelve credits in post-cégep Mathematics or permission of the Department. Introduction to algebraic systems; groups, rings, fields, homomorphisms.

NOTE: Students who have received credit for MATH 393 may not take this course for credit.

Ordinary Differential Equations MATH 370 (3 credits)

Prerequisite: MATH 245, 252, or equivalent. Separable equations, exact equations, integrating factors, force fields, first order linear equations, input-output concept, second order equations, Sturm-Liouville problems, applications, series solutions, reduction of order, variation of parameters, nth-order linear equations with constant coefficients, Laplace transforms, block diagrams, and signal-flow graphs. NOTE: Students who have received credit for

MATH 271 or MAST 330 may not take this course for credit.

MATH 371 Partial Differential Equations (3 credits)

Prerequisite: MATH 370 or equivalent. Canonical forms for second order linear equations with constant coefficients, classification of linear second order equations, method of separation of variables, first order PDE's, method of characteristics. Non-linear first order equations, complete integrals, Cauchy conditions, Cauchy-Kowalewski theorem, Fourier and Laplace transforms, Green's functions, integral representations, introduction to non-linear PDE's.

MATH 380 Differential Geometry (3 credits)

Prerequisite: MATH 245, 252, 370. Calculus on Euclidian spaces, tangent vectors, directional derivatives, differential forms, mappings, curves, frame fields, Serret-Frenet formulae, covariant derivatives; calculus on a surface, tangent spaces, differential forms on a surface, mappings between surfaces, integration of forms, Stokes' theorem.

Mathematics Lab III (2 credits) **MATH 387** This lab will demonstrate the use of MAPLE software for Calculus, Linear Algebra, and Statistics.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

MATH 392 Elementary Number Theory (3 credits)

Prerequisite: Eighteen credits in post-cégep Mathematics. Number systems, division and factorization, number-theoretic functions, congruences, algebraic congruences and primitive roots, quadratic residues, diophantine equations.

MATH 397 History of Mathematics (3 credits)

Prerequisite: MATH 245; MATH 252, or permission of the Department. Early mathematics, Greek mathematics, European mathematics in the Middle Ages, the origin and development of analytic geometry and calculus, mathematics as free creation, the generality of mathematics in the twentieth century.

MATH 433 Calculus of Variations (3 credits)

Prerequisite: MATH 345, 370. Nature of problems, weak variations, the first variation, Euler's equation. The second variation, Jacobi's equation, Legendre's test, conjugate points. Relative maxima and minima, iso-perimetrical problems. Integrals with variable end points. Applications to problems in pure and applied mathematics; the principle of least action. Strong variations, the Weierstrass E-function.

MATH 464 Real Analysis (3 credits)
Prerequisite: MATH 345 or equivalent. Metric spaces; function spaces; compactness, completeness, fixed-point theorems, Ascoli-Arzela theorem, Weierstrass approximation theorem.

MATH 466 Complex Analysis II (3 credits)
Prerequisite: MATH 345, 366. Cauchy's theorem,
singularities, maximum modulus principle,
uniqueness theorem, normal families, Riemann
mapping theorem.

MATH 467 *Measure Theory* (3 credits) Prerequisite: MATH 345 and 464 previously or concurrently, or equivalent. Lebesque measure and integration on the real line, convergence theorems, absolute continuity, completeness of L²[0,1].

MATH 470 Abstract Algebra II (3 credits)
Prerequisite: MATH 369 or equivalent. Normal subgroups, quotient groups, isomorphism theorems, polynomial rings, principal ideal rings, elementary field theory.

NOTE: Students who have received credit for MATH 394 may not take this course for credit.

MATH 471 Abstract Algebra III (3 credits)
Prerequisite: MATH 470 or equivalent. Sylow
theorems, composition series, ideal theory of
rings, Noetherian rings, modules.
NOTE: Students who have received credit for

MATH 491 may not take this course for credit.

MATH 472 Abstract Algebra IV (3 credits) Prerequisite: MATH 470 or equivalent. Elements of field and Galois theory, including straightedge-and-compass construction and unsolvability of equations of fifth degree by radicals. NOTE: Students who have received credit for MATH 492 may not take this course for credit.

MATH 474 Linear and Non-Linear Dynamical Systems (3 credits)

Prerequisite: MATH 345 or permission of the Department. Systems of linear differential equations; fundamental matrices; non-homogeneous linear systems; non-linear systems; solutions and trajectories; the phase plane; stability concepts; Liapounov's second method; periodic solutions and limit cycles; introduction to boundary-value problems and Sturm-Liouville theory.

NOTE: Students who have received credit for MATH 373 may not take this course for credit.

MATH 475 Discrete Dynamical Systems, Chaos and Fractals (3 credits)

Prerequisite: MATH 345 or permission of the Department. Introduction to discrete dynamical modelling; periodic points; bifurcation; period three points; symbolic dynamics; chaos; transitivity; conjugacy; complex behaviour; introduction to fractals; computer simulations. NOTE: Students who have received credit for MATH 379 may not take this course for credit.

MATH 478 Non-Linear Programming (3 credits)

Prerequisite: MATH 361 or permission of the Department. Classical methods of optimization, Lagrange multipliers, Kuhn-Tucker conditions; line search methods, quadratic programming, gradient methods, introduction to dynamic programming.

NOTE: Students who have received credit for MATH 436 may not take this course for credit.

MATH 479 Convex and Non-Linear Analysis (3 credits)

Prerequisite: MATH 361 or permission of the Department. Support and separation of convex sets, extreme point characterizations, convex and dual cones, Farkas' theorem; minimax theorem of Game Theory, Legendre-Fenchel conjugate, infimal convolution, subgradient calculus; Lagarngians, necessary and sufficient conditions for optimality in constrained minimization; the dual problem.

MATH 494 Topics in Pure and Applied Mathematics (3 credits)

MATH 495 Reading Course in Pure and Applied Mathematics (3 credits)

MATH 496 Honours Project in Pure and Applied Mathematics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Statistics

STAT 249 Probability I (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Axiomatic approach to probability; combinatorial probability; discrete and continuous distributions; expectation; conditional expectation; random sampling and sampling distributions.

NOTE: Students who have received credit for MATH 242 may not take this course for credit.

STAT 250 Statistics (3 credits)

Prerequisite: STAT 249 or equivalent. Point and interval estimation; hypothesis testing; Neyman Pearson Lemma and likelihood ratio tests; introduction to correlation and regression. NOTE: Students who have received credit for MATH 243 may not take this course for credit.

STAT 287 Statistics Lab I (1 credit)

This lab will be associated with courses STAT 249 and 250 and will be helpful for the Probability and Statistics examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 329 may not take this course for credit.

STAT 342 Industrial Statistics (3 credits) Prerequisite: STAT 250 or MAST 333. Concepts of statistical quality control; X-bar, R, P, and C control charts, acceptance sampling, sampling inspection, continuous sampling plans. NOTE: Students who have received credit for MATH 342 may not take this course for credit.

STAT 343 Sample Survey Theory and **Applications** (3 credits)

Prerequisite: STAT 250 or MAST 333. Basic sampling designs and estimators; simple random sampling, stratified, cluster and systematic sampling. Sampling with unequal probabilities; ratio and regression methods of estimation. NOTE: Students who have received credit for MATH 343 may not take this course for credit.

STAT 347 Introduction to Non-Parametric Statistics (3 credits)

Prerequisite: STAT 250 or MAST 333. Theory of rank tests, sign test, Mann-Whitney and Wilcoxon one-sample and two-sample tests, Kruskal-Wallis test, goodness of fit tests, Kolmogorov-Smirnov test, Pearson chi-square test, rank correlation and Kendall's tau. NOTE: Students who have received credit for MATH 347 may not take this course for credit.

Probability II (3 credits) **STAT 349** Prerequisite: STAT 249 or equivalent. Markov decision process and applications. Poisson process, queuing theory, inventory theory; applications.

NOTE: Students who have received credit for MATH 337 and/or MATH 351 may not take this course for credit.

STAT 360 Linear Models (3 credits) Prerequisite: STAT 250 or equivalent. Leastsquares estimators and their properties. General linear model with full rank. Analysis of

residuals; adequacy of model, lack of fit test, weighted least squares; stepwise regression, Durbin-Watson statistic; one way and two way analysis of variance.

NOTE: Students who have received credit for MATH 348 may not take this course for credit.

Statistics Lab II (2 credits) **STAT 388** This lab will use various softwares such as

SYSTAT, SAS, SPLUS, MINITAB for data analysis.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

STAT 449 Advanced Probability (3 credits)

Prerequisite: STAT 249 or permission of the Department. Central limit theorems and law of large numbers, convergence of random variables, characteristic function, moment generating function, probability generating functions, random walk and reflection principle. NOTE: Students who have received credit for MATH 451 may not take this course for credit.

STAT 450 Mathematical Statistics (3 credits)

Prerequisite: STAT 250; 449 previously or concurrently. Derivation of standard sampling distributions: distribution of order-statistics: estimation, properties of estimators; Rao-Cramer inequality, Rao-Blackwell theorem, maximum likelihood and method of moments estimation, Neyman-Pearson theory, likelihood ratio tests and their properties.

NOTE: Students who have received credit for MATH 454 may not take this course for credit.

STAT 452 Intoduction to Stochastic Processes (3 credits)

Prerequisite: STAT 349: 449 previously or concurrently. Continuous stochastic processes. Poisson processes, continuous time Markov process, queuing models, birth and death processes, renewal theory.

NOTE: Students who have received credit for MATH 353 may not take this course for credit.

Time Series and Forecasting **STAT 460** (3 credits)

Prerequisite: STAT 360. Time series, forecasting by trend and irregular components (using multiple regression analysis and exponential smoothing); forecasting seasonal time series, additive and multiplicative decomposition methods, Box-Jenkins methodology, moving average, autoregressive and mixed models. NOTE: Students who have received credit for MATH 443 may not take this course for credit.

Operations Research II **STAT 461** (3 credits)

Prerequisite: MATH 361; STAT 250 or equiva-

lent. Dynamic programming, renewal theory and applications, system reliability; simulation and Monte-Carlo techniques; network analysis. NOTE: Students who have received credit for MATH 437 may not take this course for credit.

STAT 465 *Multivariate Statistics* (3 credits)

Prerequisite: MATH 252; STAT 360 or equivalent. Multivariate normal distribution; estimation and testing of hypothesis about mean vector; multiple and partial correlation; MANOVA; principal components analysis.

STAT 468 Design of Experiments (3 credits)

Prerequisite: STAT 360. Construction and analysis of standard designs, including balanced designs; block designs; orthogonal designs; response surface designs.

STAT 480 Statistical Data Analysis

(3 credits)

Prerequisite: STAT 460 or permission of the

Department. The analysis of real life data sets using computer packages. Topics will involve techniques from generalized linear models; model selection; log-linear models for categorical data analysis; logistic regression; censored survival models.

NOTE: Students who have received credit for MATH 445 may not take this course for credit.

STAT 497 Topics in Statistics (3 credits)

STAT 498 Reading Course in Statistics

(3 credits)

STAT 499 Honours Project in Statistics

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.220

PHILOSOPHY

Faculty

Chair MURRAY CLARKE, Associate Professor

Professors STANLEY G. FRENCH CHRISTOPHER B. GRAY

Associate Professors SHEILA MASON DENNIS O'CONNOR JACK ORNSTEIN ANDREW WAYNE VLADIMIR ZEMAN

Adjunct Professor KAI NIELSEN

Location

Sir George Williams Campus Annex PR, Room: 202 (514) 848-2500

Department Objectives

The central mission of the Department is to contribute to the development of a critical, informed, and open mind. Classes and scholarship within the Department therefore both concentrate on and extend beyond the principal philosophical traditions that have influenced Western thought. Undergraduate courses provide a sound general education while encouraging students to follow related interests, such as political science, mathematics, or medicine. Specialization and Honours programmes prepare students for graduate studies.

Programmes

The Philosophy Department offers a number of programmes of study which include: Honours, Specialization, Major, and Minor. Double Majors programmes are also offered in consultation with other departments. The Philosophy Department should be consulted for information concerning these programmes. Seminars and tutorials are offered mainly for students in a programme in Philosophy. In addition, courses are offered to students with a general or specific interest in Philosophy. Students enrolled in Philosophy programmes are required to confirm their status with the Department during the second week of lectures of each year.

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

60 BA Honours in Philosophy

Stage I

- 18 PHIL 214³, 232³, 260³, 261³, 263³, 265³
 Stage II
- 6 PHIL 360³, 361³
- 6 PHIL elective credits
- 12 PHIL elective or cognate credits at the 300 or 400 level* Stage III
- 9 PHIL 430³, 463³, 465³
- 9 PHIL elective or cognate credits at the 400 level*

*PHIL elective or cognate credits to be chosen in consultation with the Department.

NOTE: Students must apply to the departmental Honours adviser for formal admission to Honours programmes. The application is usually made after completion of the first 30 credits.

BA Specialization in Philosophy**

Stage I

18 PHIL 214³, 232³, 260³, 261³, 263³, 265³

- Stage II
- 6 PHIL 360³, 361³
- 9 PHIL elective credits
- 9 PHIL elective or cognate credits at the 300 or 400 level* Stage III
- 18 PHIL elective or cognate credits at the 400 level*

*PHIL elective and cognate credits to be chosen in consultation with the Department.

**Admission suspended for 2000-01.

36 BA Major in Philosophy

Stage I

- 5 PHIL 232³, 260³, 261³, 263³, 265³ Stage II
- 6 PHIL 360³, 361³
- 9 PHIL elective credits: must include PHIL 210³ or 214³* Stage III
- 6 PHIL elective credits at the 400 level*
 *PHIL elective or cognate credits to be chosen in consultation with the Department.

24 Minor in Philosophy

- 6 Chosen from PHIL 2323, 2633, 2653
- 6 PHIL elective credits at the 200 level or higher
- 12 PHIL elective credits from the 300 level or higher

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

In any given year, some 400-level courses will be cross-listed with graduate courses. In order to register in cross-listed courses, students would be expected to have completed at least 21 credits in Philosophy or receive permission of the Department.

PHIL 201 Problems of Philosophy (3 credits)

This course is designed for students who wish to be acquainted with philosophy through problems rather than through the historical approach. Methods used in philosophy are discussed and topics, such as the existence of God, the mind-body problem, freedom and determinism, rights and duties, are used to illustrate philosophical approaches.

NOTE: This course may not be taken for credit by students who have taken PHIL 202 at Concordia; cégep students who have been exempted from PHIL 202 may take PHIL 201 for credit with the permission of the Department.

PHIL 210 Critical Thinking (3 credits) This course is designed to help students to think

This course is designed to help students to think more clearly and critically and to improve their ability to present, defend, and evaluate arguments. Topics may include the nature of definition, validity and truth, formal and informal fallacies. NOTE: Students who have received credit for PHIL 212 or 223 may not take this course for credit.

PHIL 214 Deductive Logic (3 credits) This course presents the modern symbolic systems of sentential and predicate logic. Students will transcribe English sentences into a logical form, analyse the concepts of logical truth, consistency, and validity, as well as learn to construct derivations in each system. NOTE: This course may not be taken for credit by students who have taken PHIL 212.

PHIL 216 Introduction to the Philosophy of Language (3 credits)

This course provides an introduction to the main problems in the philosophy of language, concerned with the analysis of the concepts of meaning, reference, truth, necessity.

PHIL 218 Inductive Logic (3 credits) Prerequisite: PHIL 214, or permission of the Department. This course provides an introduction to probabilistic and non-probabilistic approaches to inductive logic. Topics covered may include: Hume's problem of induction, the new riddle of induction, causality, and the interpretation of the probability calculus.

PHIL 220 Introduction to the Philosophy of Science (3 credits)

This course provides an introduction to the main problems in the philosophy of science. These include the structure of scientific theories, various models of scientific method and explanation, and the existence of unobservables.

NOTE: Students who have received credit for INTE 250 or PHIL 228 or SCHA 250 may not take this course for credit.

PHIL 225 Philosophical Psychology (3 credits)

A critical examination of the explanation of human behaviour and the self in the light of new developments in philosophy and psychology. Detailed studies of selected problems such as motives, intention, the concept of person, choice, reason, freedom, purpose, and action. NOTE: Students who have received credit for PHIL 326 may not take this course for credit.

PHIL 232 Introduction to Ethics (3 credits)

A study of the principles underlying moral conduct with reference to classical and contemporary positions.

NOTE: Students who have received credit for PHIL 241 may not take this course for credit.

PHIL 234 Business Ethics (3 credits) The purpose of this course is to elucidate the key ethical notions with reference to the business world. The intention is to make students

aware of situations in which ethical implications arise, rather than to impose specific rules.

NOTE: Students who have received credit for PHIL 242 may not take this course for credit.

PHIL 235 Biomedical Ethics (3 credits) This course is a study of the moral and legal norms involved in medical issues, such as health care priorities; euthanasia; fertility control and abortion, protection of the incapable; preventive medicine; problems of physician and patient relationships; human experimentation; genetic engineering; and behaviour modification. NOTE: Students who have received credit for PHIL 248 may not take this course for credit.

PHIL 255 Philosophy of Leisure (3 credits)

This course examines philosophical problems

relating to such issues as leisure, recreation, labour, time, and fulfilment. The aim is to stimulate the student to think critically about the goals of individuals and of society as they concern these issues. The course is of interest to students in Therapeutic Recreation and Leisure Sciences and to others interested in the problems of using free time to best advantage.

PHIL 260 Presocratics and Plato (3 credits)

A critical examination of some central philosophical theories of the Presocratics and Plato. NOTE: Students who have received credit for PHIL 310 or 370 may not take this course for credit.

PHIL 261 Aristotle and Romans (3 credits)

Prerequisite: PHIL 260, or permission of the Department. A critical examination of some central philosophical theories of Aristotle and the Romans.

NOTE: Students who have received credit for PHIL 310 or 370 may not take this course for credit.

PHIL 263 Introduction to Epistemology (3 credits)

An introduction to the basic concepts and problems in epistemology, including belief, knowledge, scepticism, perception, and intentionality.

PHIL 265 Introduction to Metaphysics (3 credits)

An introduction to the basic topics in metaphysics, such as substance, essence, existence, matter, form, causation, action, being.

PHIL 266 Introduction to Philosophy of Religion (3 credits)

This course examines the classical arguments for the existence of God. Course content includes the nature of faith and of religious experience, as well as the nature of religious language.

NOTE: Students who have received credit for PHIL 246 may not take this course for credit.

PHIL 285 Non-Western Philosophy (3 credits)

This course introduces the student to the philosophical activities of non-Western cultures. The particular focus differs from year to year.

PHIL 298 Introductory Topics in Philosophy (3 credits)

PHIL 299 Introductory Topics in Philosophy (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHIL 314 Intermediate Logic: Metatheory (3 credits)

Prerequisite: PHIL 214, or permission of the Department. This course presents the basic concepts of metalogic, including mathematical induction, soundness and completeness, decidability.

NOTE: Students who have received credit for PHIL 323 may not take this course for credit.

PHIL 315 Intermediate Logic: Themes and Problems (3 credits)

Prerequisite: PHIL 214, or permission of the Department. The subject of this course varies from offering to offering among the following possible studies: modal logic, probabilistic logic, many-valued logic, relevance logic, and historical themes in logic.

NOTE: Students who have received credit for PHIL 321 may not take this course for credit.

PHIL 318 (also listed as SCHA 318) Philosophy of Biology (3 credits)

Prerequisite: PHIL 220, or permission of the Department. This course examines a variety of philosophical issues in biology. Topics covered may include: fitness, function, units of selection, the nature of species, reductionism, biological explanation of human behaviour and the ethical and epistemological consequences of evolutionary theory.

NOTE: Students who have received credit for SCHA 318 may not take this course for credit.

PHIL 324 Philosophy of Social Science (3 credits)

Prerequisite: Three credits in Philosophy or 12 credits in a social science department, or permission of the Department. Philosophical examination of the structure and methodology of the social sciences.

NOTE: Students who have received credit for PHIL 346 may not take this course for credit.

PHIL 325 Minds, Brains and Machines (3 credits)

Prerequisite: PHIL 225, or permission of the Department. An examination of the computer model of the mind by consideration of the classical computationalist account and its problems, together with some attention to the connectionist alternative.

PHIL 327 Artificial Intelligence (3 credits) Prerequisite: Three credits in Philosophy or Computer Science. The purpose of this course is to explore the analogy between mental activity and the operation of computers or "electronic brains", with a view to answering the question: Can machines think? Such topics as the following are treated: the concept of the Turing machine; the Turing test of intelligence; the functionalist theory of the mind; the nature of creativity; and the alleged implications of

Gödel's incompleteness theorem. NOTE: Students who have received credit for PHIL 354 may not take this course for credit.

PHIL 328 Conceptual Revolutions in Science: Space and Time (3 credits)

This course studies the philosophical implications of major scientific revolutions in our understanding of space, time and gravity. Examples of such revolutions may include the Newtonian revolution and Einstein's theories of relativity.

PHIL 329 Conceptual Revolutions in Science: Quantum Theory

(3 credits)

This course examines the philosophical implications of quantum revolution. Topics covered may include the fundamental concepts of quantum mechanics, quantum nonlocality, Schrödinger's Cat (the measurement problem), and quantum field theory.

PHIL 333 Philosophical Ideas in Literature (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. An approach to philosophical ideas in literature through a comparison of authors. This could involve authors from different historical time frames, and different cultural world views, or elaborate different perspectives of a single author.

PHIL 339 Aesthetics (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. A survey of classical aesthetic theory in Western philosophy, with particular attention to major developments in the modern and contemporary periods.

NOTE: Students who have received credit for PHIL 353 may not take this course for credit.

PHIL 342 Political Philosophy (3 credits) Prerequisite: Six credits in Philosophy. This course provides a critical analysis of politicalphilosophical concepts. These concepts may include tolerance, violence, separatism, racism, and nationalism.

PHIL 343 Philosophy of Law: General Jurisprudence (3 credits)

A philosophical study of natural law, legal positivist, and legal realist replies to the question of what law is. Contemporary and classical replies are criticized and are applied to cases. The associated issues of legal moralism, legal justice, legal obligation and its limits, and legal reasoning are treated.

NOTE: Students who have received credit for PHIL 357 may not take this course for credit.

PHIL 344 The Philosophy of Liberalism (3 credits)

In this course, the student examines several perspectives from which the problem of the relation between law and morality may be

treated. Conflicting concepts of law, morality, and the relation of the individual to society are discussed. The problem of authority is examined in relation to issues of civil liberties, civil rights, and the social basis of legal conflicts.

PHIL 345 Legal Philosophy: Legal Rights and Duties (3 credits)

A philosophical study of the nature, sources, and functions of rights and duties. Attention is given to the particular rights associated with contract and property, and their abuse; to duties arising by law alone; to excuses and justifications for failure to fulfil duties; and to enforcement, punishment, and compromise.

NOTE: Students who have received credit for PHIL 358 may not take this course for credit.

PHIL 352 Philosophy of History (3 credits)

Prerequisite: Six credits in History, or permission of the Department. An analysis of the nature of historical knowledge and explanation is followed by a study of classical and contemporary attempts to elucidate the meaning of history. Authors discussed include Augustine, Vico, Kant, Hegel, Marx, Spengler, Popper, Toynbee, Arendt.

PHIL 356 Philosophy of Education (3 credits)

An examination of philosophical principles underlying educational theories and of the problems arising from the practical implementation of those theories.

NOTE: Students who have received credit for PHIL 349 may not take this course for credit.

PHIL 360 Rationalism (3 credits)

Prerequisite: PHIL 260, 261 and 12 credits in Philosophy, or permission of the Department. A critical study of the work of Descartes, Spinoza and Leibniz covering metaphysical, ethical and epistemological issues.

NOTE: Students who have received credit for PHIL 412 or 473 may not take this course for credit.

PHIL 361 *Empiricism* (3 credits)

Prerequisite: PHIL 260, 261, 360 and 12 credits in Philosophy, or permission of the Department. A critical study of central aspects of the work of Locke, Berkeley and Hume on a variety of philosophical issues.

NOTE: Students who have received credit for PHIL 412 or 473 may not take this course for credit.

PHIL 371 Philosophy of Feminism (3 credits)

Prerequisite: PHIL 232 and 263, or permission of the Department. This course provides an introduction to some of the central issues in contemporary philosophy of feminism. The key arguments in feminist epistemology, feminist ethics, and sex and gender studies are

discussed from a variety of perspectives. NOTE: Students who have received credit for PHIL 247 may not take this course for credit.

PHIL 377 Twentieth Century Continental Philosophy (3 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. An examination of twentieth century French and German philosophy. Philosophers examined may include Husserl, Heidegger, Merleau-Ponty, Foucault, Derrida, Habermas or others.

NOTE: Students who have received credit for PHIL 313 or 376 may not take this course for credit.

PHIL 378 American Philosophy (3 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. An analysis of some classical American pragmatists, such as Peirce, Dewey, James and C.I. Lewis, together with exponents of contemporary neo-pragmatism, such as Putnam, Rorty and Quine.

NOTE: Students who have received credit for PHIL 313 or 376 may not take this course for credit.

PHIL 385 Marxism (3 credits)

A critical analysis of the ideas of Marx and their modern development.

NOTE: Students who have received credit for PHIL 335 may not take this course for credit.

PHIL 386 Existentialism (6 credits)

A course designed to acquaint the student with the fundamentals of the existentialist movement as a philosophical perspective. Among philosophers considered are Kierkegaard, Nietzsche, Heidegger, Sartre, Merleau-Ponty, Jaspers, Marcel, and Berdyaev.

NOTE: Students who have received credit for PHIL 312 may not take this course for credit.

PHIL 398 Intermediate Special Topics in Philosophy (3 credits)

PHIL 399 Intermediate Special Topics in Philosophy (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHIL 414 Advanced Topics in Logic (3 credits)

Prerequisite: PHIL 314, or permission of the Department. This course will present the fundamentals of an advanced topic in logic. NOTE: Students who have received credit for PHIL 422 may not take this course for credit.

PHIL 416 Philosophy of Language (3 credits)

Prerequisite: Twelve credits in Philosophy among which is required PHIL 216, or permission

of the Department. Advanced study of a central problem in recent philosophy of language.

PHIL 420 Advanced Philosophy of Science: Scientific Explanation and Theory Change (3 credits)

Prerequisite: PHIL 220 and 12 credits in Philosophy, or permission of the Department. PHIL 214 is highly recommended. This course provides an in-depth study of the justification and explanatory power of scientific theories and the rationality of theory change in science. NOTE: Students who have received credit for PHIL 421 may not take this course for credit.

PHIL 422 Advanced Philosophy of Science: Scientific Realism (3 credits)

Prerequisite: PHIL 220 and 12 credits in Philosophy, or permission of the Department. PHIL 214 is highly recommended. This course provides an in-depth study of contemporary debates concerning realism and anti-realism. For instance, it examines the status of unobservable entities such as quarks, genes, and the Super-Ego.

NOTE: Students who have received credit for PHIL 421 may not take this course for credit.

PHIL 425 Philosophy of Mind: Cognitive Science (3 credits)

Prerequisite: PHIL 325, or permission of the Department. An interdisciplinary study which combines the philosophical study of mind with current research in psychology, neuro-science, linguistics, and computer science.

NOTE: Students from related disciplines are welcome, and should consult the instructor concerning prerequisites.

NOTE: Students who have received credit for PHIL 426 may not take this course for credit.

PHIL 430 Advanced Studies in Ethics (3 credits)

Prerequisite: PHIL 232, or permission of the Department. A critical analysis of leading ethical theories from Moore to the present. Special attention is given to the naturalistic fallacy, the reducibility or normative statements, ethical reasoning, and the relation of ethics to psychology and sociology.

NOTE: Students who have received credit for PHIL 456 may not take this course for credit.

PHIL 463 Honours Seminar in Epistemology (3 credits)

Prerequisite: PHIL 263 and 12 credits in Philosophy, or permission of the Department. Intensive study of major contemporary issues in the theory of knowledge.

NOTE: Students who have received credit for PHIL 460 may not take this course for credit.

PHIL 465 Honours Seminar in Metaphysics (3 credits)

Prerequisite: PHIL 265 and 12 credits in

Philosophy, or permission of the Department. Intensive study of major contemporary issues in metaphysics.

NOTE: Students who have received credit for PHIL 460 may not take this course for credit.

PHIL 471 Advanced Topics in Feminist Theory (3 credits)

Prerequisite: PHIL 371, or permission of the Department. An examination of recent issues in one of feminist ethics, epistemology or metaphysics. Subject will vary from year to year.

PHIL 474 Nineteenth-Century Philosophy (6 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. An examination of some of the main currents of post-Kantian philosophy. Hegel and the post-Hegelians, the romantic reaction, positivism, and pragmatism. NOTE: Students who have received credit for PHIL 417 may not take this course for credit.

PHIL 480 Plato (3 credits) Prerequisite: Twelve credits in Philosophy among which is required PHIL 260 and 26

among which is required PHIL 260 and 261, or permission of the Department. An analysis of some of the central themes in the major dialogues of Plato.

PHIL 481 Aristotle (3 credits)

Prerequisite: Twelve credits in Philosophy among which is required PHIL 260 and 261, or permission of the Department. An analysis of the central themes in selected passages from the major works of Aristotle.

PHIL 485 Kant (6 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. An intensive study of Kant's *Critique of Pure Reason* and related works.

PHIL 486 Hegel (6 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. An analysis of selected themes from Hegel's works.

PHIL 487 Early Analytic Philosophy (3 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. This course investigates selected philosophical problems as they arise in the writings of such early analytic philosophers as Moore, Russell, Ayer, Carnap, and the early Wittgenstein.

NOTE: Students who have received credit for PHIL 467 may not take this course for credit.

PHIL 488 Contemporary Analytic Philosophy (3 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. This course investigates selected philosophical problems as they arise in the writings of such analytic philosophers as the later Wittgenstein, Quine, Ryle, Wisdom, Austin, and others.

NOTE: Students who have received credit for PHIL 468 may not take this course for credit.

PHIL 489 Phenomenology (6 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. Origins and development of phenomenology from Brentano and Meinong through the different stages of Husserl's writings. Post-Husserlian modifications are considered briefly. The second term is devoted to a discussion of the influence of the phenomenological movement on contemporary developments in the social sciences and humanities. Actual topics are determined by the student's areas of interest and academic qualifications.

NOTE: Students who have received credit for PHIL 449 may not take this course for credit.

PHIL 496 Tutorial in Philosophy (3 credits)

Prerequisite: Permission of the Department. This is an opportunity to carry out a personal project under the supervision of a Faculty member. An intensive reading programme is undertaken in the student's area of special interest. Tutorials may be arranged with any Faculty member, and the student must make these arrangements and obtain written permission in advance of registration.

NOTE: Students who have received credit for PHIL 471 may take this tutorial for credit provided the subject matter is different.

PHIL 497 Tutorial in Philosophy (3 credits)

Prerequisite: Permission of the Department. See PHIL 496 for description.

NOTE: Students who have received credit for PHIL 472 and/or 496 may take this tutorial for credit provided the subject matter is different.

PHIL 498 Advanced Topics in Philosophy (3 credits)

PHIL 499 Advanced Topics in Philosophy (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.230

PHYSICS

Faculty

J. DAVID CHEEKE, Professor

Professors BARRY FRANK CALVIN S. KALMAN SUSHIL K. MISRA PANAGIOTIS VASILOPOULOS

Associate Professors MARIANA FRANK RAMESH C. SHARMA JOSEPH SHIN

Adjunct Professors M. STEPHEN DUBAS, s.j. NELSON W. EDDY ARLIN L. KIPLING STANLEY P. MORRIS

Location

Sir George Williams Campus Hall Building, Room: H 841 (514) 848-3270

Department **Objectives**

In the twentieth century, breakthroughs in physics have revolutionized thinking about the fundamentals of matter, motion, and energy. Physics is the study of these fundamentals. The Physics Department is committed to preparing students for careers or advanced study in both the theoretical and applied aspects of physics. Students in the co-op programme gain valuable job experience and discover the career opportunities open to them in addition to regular course work.

Programmes

Students are required to complete the appropriate entrance profile for entry into the programme (see §31.002 — Programmes and Admission Requirements — Profiles).

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

42 Core Programme

- 6
- MAST 218³, 219³ PHYS 232³, 233³, 245³, 253³, 254³, 334³, 335³, 346³, 352³, 364³, 477³ PHYS 291¹, 293¹, 394¹ 33
- 3

BSc Specialization in Physics 63

- Core Programme 42
- PHYS 336³, 435³, 458³, 466³ or 467³
- Chosen from PHYS 290² and 297¹, 353³, 355³, 466³ or 467³, 478³, 494³, 498³

BSc Specialization in Physics/ 90 Marketing

- 42 Core Programme
- COMM 210³, 212³, 215³, 222³, 224³ ECON 201³, 203³ 15

- 3 ACCO 220³
- 12 Chosen from the Department of Marketing
- Elective credits (physics, math and computing)

42 BSc Major in Physics

Core Programme Students in the Major programme may replace PHYS 3463 with PHYS 3553 and/or PHYS 4773 with PHYS 3533

PHYSICS CO-OPERATIVE PROGRAMME

J. DAVID CHEEKE, Professor

The Physics Co-operative programme is offered to students who are enrolled in the BSc Specialization programmes in Physics. Students interested in applying for the Physics co-op should refer to §24 where a full description of the admission requirements is provided. Academic content is very similar to that of the regular programmes, with some specific recommendations for courses to improve the students' job skills. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Physics co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PHYS 204 *Mechanics* (3 credits)

Prerequisite: MATH 203 or equivalent, previously or concurrently. Kinematics, Newton's laws of motion. Statics, dynamics. Conservation of momentum and energy. Rotational motion. Periodic motion. Lectures only.

NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration. See PHYS 224 for laboratory associated with this course.

PHYS 205 Electricity and Magnetism (3 credits)

Prerequisite: MATH 203, PHYS 204 or equivalent. Electrical charge and Coulomb's law. Electrical field and potential. Capacity, steady state, and transient currents. Electromagnetic induction and alternating currents. Lectures only. NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration. See PHYS 225 for laboratory associated with this course.

PHYS 206 Waves and Modern Physics (3 credits)

Prerequisite: PHYS 204 or equivalent. Simple harmonic motion. Wave propagation. Superposition. Stationary waves. Doppler effect. Interference. Diffraction. Photoelectric effect. Compton effect. Bohr's atom. Radioactivity, fission, fusion. Lectures only.

NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration. See PHYS 226 for laboratory associated with this course.

PHYS 210 Discoveries in Physics (6 credits)

A non-mathematical course in physics specifically designed for students who have had little or no experience in physics. This courses traces the fundamental ideas from which modern physics has emerged, and attempts to develop insights into the understanding of natural phenomena. Lectures only.

NOTE: Students in programmes leading to the BSc degree may not take this course for credit.

PHYS 224 Introductory Experimental Mechanics (1 credit)

Prerequisite: PHYS 204 previously or concur-

rently, or permission of the Department. This laboratory course covers fundamental experiments in classical mechanics. Experiments include resolution of forces, centrifugal force and conservation of energy, pendulums. Laboratory only, 10 experiments. NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentra-

PHYS 225 Introductory Experimental Electricity (1 credit)

Prerequisite: PHYS 205 previously or concurrently, or permission of the Department. This laboratory course covers fundamental experiments in electricity. Experiments include Kirchhoff's law, resistors in series and parallel, oscilloscope, induction, alternating current. Laboratory only, 10 experiments.

NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration

PHYS 226 Introductory Experimental Waves and Modern Physics

(1 credit)

Prerequisite: PHYS 206 previously or concurrently, or permission of the Department. This laboratory course covers the fundamental experiments in waves and modern physics. Experiments include spectrometer measurements. Newton's rings and measurements involving radioactivity. Laboratory only, 10 experiments.

NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration.

PHYS 232 Theoretical Physics I (3 credits)

Prerequisite: MAST 218 previously or concurrently. Linear algebra: vector spaces, Euclidean n-space, linear transformations, matrices, similarity transformations, diagonalization, applications. Differential equations: Wronskian, n-th order differential equations, linear differential equations with variable coefficients, power series method. Lectures only.

PHYS 233 Object-Oriented Programming and Applications (3 credits)

Prerequisite: MATH 203, 204. This course is an

introduction to object-oriented programming using C++ and Unix, Common Unix commands, and the vi(m) editor. It focuses on E-mail (pine), transfer of files over the Internet, accessing course materials on the Web, C++ classes and objects, class design and implementation, data types, operators, functions, selection statements, repetition statements, arrays and pointers. Applications include fundamentals of statistics, and linear least squares analysis.

NOTE: Students who have received credit for COMP 215 or 248 may not take this course for credit.

PHYS 234 Computational Methods in Science (3 credits)

Prerequisite: MATH 203, 204. This course reviews Internet access of course materials and main principles of object-oriented programming. There is an exchange of files containing greek letters, scientific formulae, etc. (TeX, LaTeX, Scientific Notebook and Maple). Creation of Web pages. Graphical display of functions and data obtained from other applications (including C++ output files). Root finding, Runge-Kutta method for differential equations, numerical integration, systems of linear equations, Monte Carlo computer simulations.

NOTE: Students who have received credit for this topic under a PHYS 298 number may not take this course for credit.

PHYS 245 Classical Mechanics (3 credits)

Prerequisite: MATH 204, 205 or equivalent. Statics of rigid bodies, work and potential functions, motion in uniform field. Particle motion in an accelerated frame, rotation coordinate systems, motion in a resisting medium, small oscillations, damped (harmonic) motion, motion under central forces, mechanics of a rigid body, dynamics of systems of particles, motion of rigid bodies in three dimensions, elements of Lagrangian mechanics. Lectures only.

NOTE: See PHYS 291 for laboratory associated with this course.

NOTE: Students who have received credit for PHYS 243 or 244 may not take this course for credit.

PHYS 253 Electricity and Magnetism I (3 credits)

Prerequisite: PHYS 205 or equivalent; MAST 218 or equivalent, previously or concurrently. Electrostatics, Gauss' law, electric potential, curl and divergence of fields, capacitance, RC circuits, Laplace's equation, Legendre equation, method of images, multipole expansion, dielectrics, polarization, dipole moments, electric displacement. NOTE: See PHYS 293 for laboratory associated with this course.

PHYS 254 Electricity and Magnetism II (3 credits)

Prerequisite: PHYS 253 or equivalent; MAST 219 or equivalent, previously or concurrently. Biot-

Savart Law, Ampere's law, divergence and curl of B, magnetic vector potential, magnetization, ferromagnetism, electromagnetic induction, motional EMF, inductance, transformer, ac-circuits, Maxwell's equations, the wave equation, polarization, reflection and transmission of em waves, rectangular wave guide, half-wave antenna. Lectures only.

PHYS 270 Introduction to Energy and Environment (3 credits)

This course is designed for students who have little or no background in physics. Topics covered include relationship of physics to environment and energy. Concept and definition of work and energy. Interaction of people and inanimate objects with the environment. Heat and chemical energy. Electromagnetic and nuclear energy. Conservation of energy — how it affects everyday life. Sources of energy used on earth. Solar energy. Production of wind power, water power, solar cells from sun's energy, biological uses, biopower. Lectures only. NOTE: Students in programmes leading to the BSc degree may not take this course for credit.

PHYS 273 Energy and Environment (3 credits)

Prerequisite: PHYS 270, or six credits in cégep Physics, or equivalent. Nuclear energy stored in the earth. Geothermal energy. Biological energy stored in the earth. Second law of thermodynamics. Entropy. Food energy. Home heating and cooling. Solar heating. Transportation of people, goods, and energy. Recycling materials. Resource conservation and humanity's ability to change — need for a conservation ethic, need for alternate energy sources, need for public knowledge. Lectures only.

PHYS 290 Experimental Electronics (2 credits)

Prerequisite: PHYS 205, 225 or equivalent. A practical laboratory course in electronics. This course explores the usage of electronic measuring instruments and components. Experiments include power supplies, transistor amplifiers, operational amplifiers, oscillators, audio and radio frequency amplifiers.

NOTE: Students who have received credit for PHYS 295 and 296 may not take this course for credit.

PHYS 291 Experimental Mechanics I (1 credit)

Prerequisite: PHYS 245 previously or concurrently. A laboratory course in mechanics. Experiments include pendulum, coefficient of restitution, centrifugal force, rotational inertia, inelastic impact.

PHYS 292 Experimental Mechanics II (1 credit)

Prerequisite: PHYS 291. A laboratory course in mechanics. Experiments include the use of air

tracks to study acceleration, collisions, dissipative forces, and periodic motion. Other experiments include viscosity and surface tension of liquids.

PHYS 293 Experimental Electricity and Magnetism I (1 credit)

Prerequisite: PHYS 253 previously or concurrently. A laboratory course in electricity and magnetism. Experiments include motion of electrons in electric and magnetic fields, exponential relaxation, damped oscillations, resonance, non-linearity, negative resistance.

PHYS 294 Experimental Electricity and Magnetism II (1 credit)

Prerequisite: PHYS 293. A laboratory course in electricity and magnetism. Experiments include the transistor, amplification and frequency response, transient response and negative feedback, positive feedback and oscillation, periodic structures.

PHYS 295 Experimental Electronics I (2 credits)

A practical laboratory course in electronics. Experiments include resistors in series and parallel, voltameter, Ohm's law, Kirchhoff's current and voltage laws, Ohmmeter, capacitor, inductor, transformer, rectifiers, voltage doubler, zener diode, power supplies.

NOTE: Students who have received credit for PHYS 290 may not take this course for credit.

PHYS 296 Experimental Electronics II (2 credits)

Prerequisite: PHYS 295. A practical laboratory course in electronics. Experiments include oscilloscope, biasing of bipolar transistors, transistor amplifiers, voltage and current regulators, field-effect transistor, oscillators, operational amplifier circuits, audio amplifier, I-F transformer, limiter, amplitude and frequency modulation.

NOTE: Students who have received credit for PHYS 290 may not take this course for credit.

PHYS 297 Experimental Optics (1 credit)
Prerequisite: PHYS 352 previously or concurrently. An experimental course in optics. Experiments include diffraction, optical instruments, resonance, and various experiments using lasers. Laboratory only, 10 experiments.

NOTE: Students who have received credit for PHYS 392 may not take this course for credit.

PHYS 298 Selected Topics in Physics (3 credits)

PHYS 299 Selected Topics in Physics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHYS 334 *Thermodynamics* (3 credits) Prerequisite: PHYS 204 or equivalent; MAST 218, 219 or equivalent. Equation of state, ideal and real gases, thermodynamic surfaces, first law of thermodynamics, isothermal and adiabatic processes, the energy equation, liquefaction of gases, Carnot engine, second law of thermodynamics, entropy, third law, thermodynamic potentials, Clausius-Clapeyron equation, kinetic theory, equipartition of energy, Van der Waals' equation, transport phenomena, probability and thermal distributions. Lectures only.

NOTE: See PHYS 393 for laboratory associated with this course.

PHYS 335 Theoretical Physics II (3 credits)

Prerequisite: PHYS 232 or equivalent; MAST 219 previously or concurrently. Function of a complex variable, Fourier series, applications to a vibrating string, heat conduction, Fourier transform, Laplace transform, application to differential equations, delta functions, eigenvalue problems. Lectures only.

PHYS 336 Theoretical Physics III (3 credits)

Prerequisite: PHYS 335 or equivalent. Partial differential equations, eigenfunction expansion and finite transforms, Laplace, Poisson, wave and diffusion equations, applications, special functions, boundary value problems, Sturm-Liouville theory, Bessel functions, Legendre and Hermite polynomials, spherical harmonics, Green's function and applications, perturbation theory, (variational theory). Lectures only.

PHYS 346 Advanced Classical Mechanics and Special Relativity (3 credits)

Prerequisite: PHYS 232 or equivalent, PHYS 245 or equivalent; MAST 219 or equivalent. Generalized coordinates, Lagrange's equations, method of Lagrange multipliers, variation formulation, Hamilton's equations of motion, canonical transformation, Hamilton-Jacobi theory, special theory of relativity, Einstein's axioms, Lorentz transformation, form invariance and tensors, four-vector, gravity. Lectures only.

NOTE: Students who have received credit for PHYS 344 or 345 may not take this course for credit.

PHYS 352 Optics (3 credits)

Prerequisite: PHYS 206; PHYS 254 recommended. Superposition of waves, phase and group velocities, dispersion, interference, double slit, Michelson interferometer, reflectance and transmittance of thin films, diffraction, Fraunhofer and Fresnel diffraction, polarization, polariscope, dichroism, Fabry-Perot etalon, electron, acoustic and other microscopes, resolving power, Fourier optics, introduction to lasers and fibre optics. Lectures only.

NOTE: Students who have received credit for PHYS 252 may not take this course for credit.

PHYS 353 Solid State Electronic Devices (3 credits)

Prerequisite: PHYS 253 or equivalent. Crystal structure, energy band theory, carrier transport,

depletion region, current-voltage characteristics, Zener diode, metal-semiconductor junction, special diodes, tunnel diode, photo-diode, LEDs, Schottky diode, bipolar junction transistors, field effect transistors, metal oxide semiconductor FET, integrated circuits, elements of integrated circuits. Lectures only.

NOTE: Students who have received credit for PHYS 354 may not take this course for credit.

PHYS 355 *Electronics* (3 credits)

Prerequisite: PHYS 353 recommended. Basic circuit analysis, network theorems, maximum power transfer, diode characteristics and circuits, power supply designs, transistor characteristics, incremental equivalent circuits, input and output impedance calculations, emitter follower and Darlington amplifiers, power amplifiers, dc stabilization and negative feedback, operational amplifiers, phase detection, frequency multiplier and special circuits. Lectures only.

NOTE: See PHYS 290 for laboratory associated with this course.

PHYS 364 Atomic Physics (3 credits)
Prerequisite: PHYS 205, 206 or equivalent;
PHYS 254 recommended. The photoelectric effect, X-ray and bremsstrahlung, Compton effect, photon-electron interaction, DeBroglie waves, X-rays and electron diffraction, the uncertainty principle, Schrödinger's equation, particle in a box, Bohr theory of the hydrogen atom, Schrödinger's equation of hydrogen atom, Franck-Hertz experiment, Zeeman effect, electron spin, Stern-Gerlach experiment. Lectures only.

NOTE: See PHYS 394 for laboratory associated with this course.

PHYS 384 Introduction to Astronomy (3 credits)

Prerequisite: PHYS 205 or equivalent; MATH 205 or equivalent. The celestial sphere. The solar system. Celestial mechanics. Basic stellar characteristics. The galaxy — structure and content. Extragalactic objects. Lectures only.

PHYS 385 Astrophysics (3 credits)
Prerequisite: PHYS 384. The stars, stellar atmospheres, motion, interiors, and populations. Variable stars. Nebulae. Radio, X-ray, and infrared sources. The galaxy — population and dynamics. The extragalactic universe. Lectures only.

PHYS 390 Experimental Digital Electronics (3 credits)

Prerequisite: PHYS 296 or equivalent. Breadboarding digital circuits; gating a signal; truth tables; decade counter; decoders, demultiplexers, multiplexers and sequencers; light-emitting diodes and LED displays; tristate and open collector outputs; flip-flops, monostable multivibrators; semiconductor memories; registers, binary counters, arithmetic logic units. Laboratory only. NOTE: Students who have received credit for PHYS 396 may not take this course for credit.

PHYS 391 Introduction to Experimental Microprocessors and Assembly Language Programming (3 credits)

Prerequisite: PHYS 233, COMP 212 or equivalent. Eight-bit microprocessor architecture: opcodes, addressing modes, memory mapped I/O, vectored interrupts, etc. The MS/DOS operating system, word processing, Motorola assembly language: pseudocodes, labels, subroutines, interrupt service routines, structured programming techniques. Cross assemblers, RS232 serial transmission of ASCII and binary data to remote computers. Laboratory only. NOTE: Students who have received credit for PHYS 396 may not take this course for credit.

PHYS 392 Experimental Medical Electronics (3 credits)

Prerequisite: PHYS 290 or 296, or equivalent. A laboratory course in the maintenance and use of medical instruments, including ECG monitor, electrocardiograph, cardio-tachometer, blood-pressure recorder, respiration-rate recorder, and clinical thermometer. The component parts of the instruments are studied first, and then the instruments are constructed and tested. Laboratory only.

NOTE: Students who have received credit for PHYS 397 may not take this course for credit.

PHYS 393 Experimental Thermodynamics (1 credit)

Prerequisite: PHYS 334 previously or concurrently. A laboratory course in thermodynamics. Experiments include Clement and Desormes' experiment, vaporization, specific heats, liquid nitrogen boiling. Laboratory only, 10 experiments. NOTE: Students who have received credit for PHYS 494 may not take this course for credit.

PHYS 394 Experimental Atomic Physics (1 credit)

Prerequisite: PHYS 226 or equivalent, or permission of the Department. An experimental course in atomic physics. Experiments include the Frank-Hertz experiment, the Zeeman effect, mass spectrometer, and some X-ray work. Laboratory only, 10 experiments.

PHYS 398 Selected Topics in Physics (3 credits)

PHYS 399 Selected Topics in Physics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHYS 435 Statistical Physics (3 credits) Prerequisite: PHYS 334, 364. Statistical concepts, probability, Gaussian probability distribution, statistical ensemble, macrostates and microstates, thermodynamic probability, statistical thermodynamics, reversible and

irreversible processes, entropy, thermodynamic laws and statistical relations, partition functions, Maxwell's distributions, phase transformation, Maxwell-Boltzmann, Fermi-Dirac, and Bose-Einstein statistics, quantum statistics in classical limit, black-body radiation, conduction of electrons in metal, interacting particle system, lattice vibrations, virial coefficients, Weiss molecular field approximation. Lectures only.

PHYS 458 Advanced Electrodynamics (3 credits)

Prerequisite: PHYS 254, 336. Electrostatic boundary-value problem and Green's function, Maxwell's equation, energy-momentum tensor, guided waves, dielectric wave guides, fibre optics, radiation static field, multipole radiation, velocity and acceleration field, Larmor's formula, relativistic generalization, radiating systems, linear antenna, aperture in wave guide, Thomson scattering, bremsstrahlung, Abraham-Lorentz equation, Breit-Wigner formula, Green's function for Helmholtz's equation, Noether's theorem. Lectures only.

NOTE: Students who have received credit for PHYS 456 or 457 may not take this course for credit.

PHYS 466 Nuclear Physics (3 credits)
Prerequisite: PHYS 364; PHYS 477 previously
or concurrently. Introduction, quantum mechanical properties of the nucleus, nuclear mass and
shape, nuclear models, radioactivity, alpha, beta
and gamma radiation, nuclear models, nuclear
fission, parity violation, fundamental forces,
strong and weak interaction, conservation laws,
quark model and quantum chromodynamics.
Lectures only.

NOTE: Students who have received credit for PHYS 465 may not take this course for credit.

PHYS 467 Solid State Physics (3 credits)
Prerequisite: PHYS 477 previously or concurrently. Crystal structure of solids. Lattice dynamics. Specific heat. Electrons in metals.
Free-electron theory of conduction. Band theory. Semi-conductors. Dielectric and magnetic properties of solids. Lectures only.

PHYS 477 Quantum Mechanics I (3 credits)

Prerequisite: PHYS 335, 346, 364. Introduction, state function, linear momentum, momentum space configuration, momentum space operators, free particle motion, Dirac notation, Schrödinger's equation, Hermitian operators, parity and symmetry of state function, harmonic oscillator, creation and annihilation operators, first and second order time independent perturbation theory.

PHYS 478 Quantum Mechanics II (3 credits)

Prerequisite: PHYS 477. Particle states, classification of symmetry, parity, numerical solution of Schrödinger's equation, WKB approximation, variational method, alpha decay probability, time-dependent perturbation theory, systems of particles in one dimension, interacting particles, identical particles, Pauli exclusion Principle, Motion in three dimensions, hydrogen atom, angular momentum and spin, Pauli spin matrices, Dirac's relativistic wave equation.

PHYS 480 Directed Readings in Theoretical Physics (3 credits)

Prerequisite: Permission of the Department. A course for advanced students in which a special topic, selected in consultation with a faculty member, is studied in depth.

PHYS 491 Experimental Microprocessor Interfacing (3 credits)

Prerequisite: PHYS 390; PHYS 391 or equivalent. Address decoding, multiplexing, and demultiplexing with TTL integrated circuits. Address decoding circuits, drivers, and receivers. Parallel, serial and non-TTL I/O. Breadboarding, wire-wrapping, and soldering techniques. The use of oscilloscopes, logic probes, and computers for circuit trouble-shooting. Drawing schematic diagrams. Timing diagrams. Data sheets. Laboratory only.

PHYS 494 Methods of Experimental Physics (3 credits)

Prerequisite: PHYS 290, 293, 394 or equivalent, or permission of the Department. A supervised research project which may include experiments in nuclear physics, laser and fibre-optics, solid state physics, ultrasonics, or thermal physics. A technical report is required.

PHYS 495 Experimental Nuclear Physics (1 credit)

Prerequisite: PHYS 394; PHYS 466 previously or concurrently. A laboratory course in nuclear physics. Experiments include gamma- and beta-ray spectroscopy, nuclear magnetic resonance, half-life determination, nuclear activities. Laboratory only, 10 experiments.

PHYS 498 Advanced Topics in Physics (3 credits)

PHYS 499 Advanced Topics in Physics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.240

POLITICAL SCIENCE

Faculty

Chair REETA C. TREMBLAY, Associate Professor

Professors
HAROLD R. CHORNEY
HORST HUTTER
ARTHUR KROKER
GUY LACHAPELLE
DANIEL SALÉE

Professor Emeritus HENRY P. HABIB

HARVEY SHULMAN

Associate Professors MARCEL DANIS BROOKE JEFFREY MABEN POIRIER EVERETT M. PRICE

Assistant Professors JANINE KRIEBER PIERRE OSTIGUY DENIS SAINT MARTIN PETER STOETT

Location

Sir George Williams Campus Annex D, Room: 103 (514) 848-2105

Department Objectives

The Department of Political Science offers a wide range of courses and programmes to acquaint students with the complex workings of contemporary government and politics. The curriculum provides the theoretical foundations, analytical skills, and research methods for understanding the making of government policy as well as the underlying nature and purpose of political processes and institutions. The aim is to prepare well-rounded, concerned citizens for careers in the public service and the private sector, or for graduate or law school.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

60 BA Honours in Political Science

- 12 POLI 202³, 204³, 205³, 206³
- 6 Chosen from POLI 364³, 371³, 373³, 384³
- 6 Chosen from POLI 392³ and 393³; or 372⁶
- 33 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with a minimum of 12 credits at the 400 level
- 3 POLI 4963 (Honours Seminar)

42 BA Major in Political Science

- 12 POLI 202³, 204³, 205³, 206³
- 30 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with at least six credits at the 400 level

24 Minor in Political Science

- 12 POLI 202³, 204³, 205³, 206³
- 12 Chosen from any of the five groups in Political Science. A minimum of nine credits must be taken at the 300 or 400 level.

The Department of Political Science offers the following programmes of study: an Honours, a Major, and a Minor.

In order to maintain Honours status, students must obtain approval for their programmes from the Honours adviser each year, prior to registration. In the second year of the Honours programme, each student will choose a faculty adviser to advise the student on course selection and seminar research essays.

The programme of courses leading to a Minor in Political Science consists of 24 credits in the Department. The Minor is designed to provide an opportunity for students to make a combination with a Specialization, a Major, or Honours in another discipline. A student's Minor will be arranged in consultation with the Department of Political Science so that it relates to courses in the Major area of study.

CORE PROGRAMME Core Programme POLI 202 Introduction to Political Science POLI 205 Introduction to International Politics (3 credits) (3 credits) POLI 204 Introduction to Canadian Politics POLI 206 Introduction to Western Political Theory (3 credits) (3 credits) POLI 213 Contemporary Issues in Global POLI 388 Human Rights and International Group 1: Justice (3 credits) Politics (3 credits) International Politics POLI 303 Globalization, Identity and the State POLI 391 Middle East and Global Conflict (3 credits) (3 credits) POLI 305 International Political Economy POLI 394 Globalization and Sustainable (3 credits) Development (3 credits) POLI 306 State and Devolution (3 credits) POLI 419 Strategic Studies (3 credits) POLI 307 Regional Integration and the Nation POLI 421 Transnational Politics (3 credits) State (3 credits) POLI 422 Canadian Foreign Policy (3 credits) POLI 311 International Public Law (3 credits) POLI 423 Peace Studies and Global POLI 315 International Organizations (3 credits) Governance (3 credits) POLI 329 American Foreign Policy (3 credits) POLI 486 Advanced Seminar in International POLI 332 Theories of International Relations Relations (3 credits) (3 credits) POLI 338 Foreign Policy Making and Diplomatic Relations (3 credits) POLI 301 Social Movements and Protest POLI 366 Politics of Africa (3 credits) Group 2: Politics (3 credits) POLI 379 Politics of Latin America (3 credits) Comparative Politics POLI 310 Politics of the U.S. (3 credits) POLI 380 Comparative Public Administration POLI 319 European Politics and Government and Bureaucracy (3 credits) (3 credits) POLI 395 Politics of the Middle East (3 credits) POLI 323 Politics of Eastern Europe (3 credits) POLI 424 India: State and Societal Relations POLI 326 Women, Ethics and the Law in (3 credits) Canada (3 credits) POLI 481 Issues in Western European Politics POLI 328 Public Policy and the Politics of (3 credits) Equality (3 credits) POLI 482 State and Society in Asia (3 credits) POLI 333 Politics of Russia (3 credits) POLI 483 State and Society in Latin America POLI 335 Politics of China (3 credits) (3 credits) POLI 336 Politics of South Asia (3 credits) POLI 484 Post-Communist Societies and POLI 337 Politics of Japan (3 credits) States in Transition (3 credits) POLI 344 Comparative Political Analysis POLI 485 Issues in Development and (3 credits) Democracy (3 credits) POLI 352 Comparative Urban Politics and POLI 487 Advanced Seminar in Comparative Government (3 credits) Politics (3 credits) POLI 211 Québec Politics and Society/ POLI 350 Canadian and Québec Law Group 3: La vie politique québécoise (6 credits) Canadian and Québec (3 credits) POLI 351 Canadian Federalism (3 credits) **Politics** POLI 308 Canadian Politics and Society POLI 355 Nationalism: The Canadian (3 credits) Experience (3 credits) POLI 309 Women and Politics in Canada POLI 356 Canadian Political Parties (3 credits) (3 credits) POLI 363 Issues in Canadian Public Policy POLI 318 Citizen Participation in the Political (3 credits) Process (3 credits) POLI 365 Canadian Public Administration POLI 322 Immigration and Citizenship (3 credits) (3 credits) POLI 367 Québec Public Administration POLI 326 Women, Ethics and the Law in (3 credits) Canada (3 credits) POLI 438 Comparative Provincial Politics in POLI 328 Public Policy and the Politics of Canada (3 credits)

Equality (3 credits)

City (3 credits)

POLI 349 Political and Social Theory and the

POLI 488 Advanced Seminar in Canadian and

Québec Politics (3 credits)

Group 4:
Public Policy and
Administration

POLI 212 Politics and Economy (3 credits)	POLI 363 Issues in Canadian Public Policy
POLI 305 International Political Economy	(3 credits)
(3 credits)	POLI 365 Canadian Public Administration
POLI 320 Development of Western Legal	(3 credits)
Systems (3 credits)	POLI 367 Québec Public Administration
POLI 328 Public Policy and the Politics of	(3 credits)
Equality (3 credits)	POLI 380 Comparative Public Administration
POLI 330 Principles of Public Administration	and Bureaucracy (3 credits)
(3 credits)	POLI 394 Globalization and Sustainable
POLI 338 Foreign Policy Making and	Development (3 credits)
Diplomatic Relations (3 credits)	POLI 461 The State and Economic Life
POLI 349 Political and Social Theory and the	(3 credits)
City (3 credits)	POLI 463 Government and Business in
POLI 352 Comparative Urban Politics and	Canada (3 credits)
Government (3 credits)	POLI 480 Comparative Public Policy (3 credits)
POLI 361 Government, Society and Public	POLI 489 Advanced Seminar in Public Policy
Purpose (3 credits)	and Evaluation (3 credits)
POLI 362 Policy Analysis and Programme	and Evaluation (5 cledits)
TOLIOU TONOY / mary 515 and Trogramme	

Group 5: Political Theory

POLI 326	Women, Ethics and the Law in Canada (3 credits)	POLI 387	The American Political Tradition (3 credits)
POLI 349	Political and Social Theory and the City (3 credits)	POLI 390	Ethics and Competing Political Perspectives (3 credits)
POLI 361	Government, Society and Public Purpose (3 credits)	POLI 392	Survey and Research Design (3 credits)
POLI 364	Hellenistic, Roman, Medieval Political Philosophy (3 credits)	POLI 393	Empirical Research Methods (3 credits)
	Media, Technology and Politics (3 credits)	POLI 420	Contemporary French Political Thought (3 credits)
POLI 371	Early Modern Political Philosophy (3 credits)		Critics of Modernity (3 credits) Marxist and Neo-Marxist Political
POLI 372	Political Science and Scientific Method (6 credits)	POLI 461	Thought (3 credits) The State and Economic Life
POLI 373	Late Modern Political Philosophy (3 credits)	POLI 471	(3 credits) Political Thought and Ideology in
POLI 375	Nationalism: Origins, Operation, and Significance (3 credits)		Canada (3 credits) Political Theory and Historical
POLI 384	Principles of Political Theory (3 credits)		Understanding (3 credits) Advanced Seminar in Political
POLI 386	Contemporary Liberalism and Its Critics (3 credits)	1 011 430	Theory (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.: Explanation of course numbers and the core programme:

- Political Science Honours, Major students should normally complete the 12-credit core
 programme in their first year of full-time equivalent studies. MEP and ECP students must consult
 an academic adviser regarding the completion of the 12-credit core.
- Courses at the 200 and 300 level are open to all students in other departments and faculties. NOTE: 200-level courses are introductory, 300-level courses require the ability to do independent research and to write analytical essays.
- Courses at the 400 level are taught as seminars and are generally open to students who have successfully completed 24 university credits, three of which are at the 300 level in Political Science.

POLI 202 Introduction to Political Science (3 credits)

Evaluation (3 credits)

This course seeks to develop a broad basis from which to pursue further political inquiry. It offers an introductory examination of basic ideas regarding the state, power, authority, and systems of government. The course examines the diverse approaches to the specific study of political phenomena and provides a fundamental

understanding of political concepts.

NOTE: Students who have received credit for POLI 200 or 201 or 203 may not take this course for credit.

POLI 204 Introduction to Canadian Politics (3 credits)

This course is a basic introduction to the fundamental issues of Canadian public life and

the federal political system. It presents an overview of the constitution, institutions, political parties, electoral system, interest groups, and public opinion that represent the essential components of Canada's political culture and government.

NOTE: Students who have received credit for POLI 232 or 234 or 250 may not take this course for credit.

POLI 205 Introduction to International Relations (3 credits)

This course introduces the principal themes, terms, concepts, and debates in the contemporary study of international relations. It provides an historical analysis of global politics and international economy.

NOTE: Students who have received credit for POLI 207 or 208 or 210 may not take this course for credit.

POLI 206 Introduction to Western Political Theory (3 credits)

This course explores the foundations and basic principles of Western political theory in ancient Greece. It covers concepts such as democracy and oligarchy, justice and the good life by way of a careful reading of texts by Greek tragedians, historians, and philosophers. Texts studied in the course may include writings by Aeschylus or Sophocles and Thucydides, as well as Plato and Aristotle.

NOTE: Students who have received credit for POLI 270 or 271 may not take this course for credit.

POLI 211 Québec Politics and Society/ La vie politique québécoise (3 credits)

This course is a study of the changing party structure and political issues in Québec and their relationship to constitutional, cultural, and economic factors.

On étudiera dans ce cours l'évolution structurelle des partis et des questions politiques au Québec en fonction de facteurs d'ordre constitutionnel, culturel et économique.

NOTE: Students who have received credit for POLI 353 may not take this course for credit. NOTE: The course will be offered in both English and French on a rotational basis. Please consult the Undergraduate Class Schedule for details.

POLI 212 Politics and Economy (3 credits)

This course is a general introduction to the interaction between politics and economy. It focuses on the impact of international and national economic structures on domestic political systems.

POLI 213 Contemporary Issues in Global Politics (3 credits)

This course introduces students to major trends and issues in world politics, such as human

rights, refugees, ethnic conflict, environmental degradation, migration, and the peacekeeping role of the U.N.

POLI 298 Selected Topics in Political

Science (3 credits)

POLI 299 Selected Topics in Political

Science (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 301 Social Movements and Protest Politics (3 credits)

This course surveys the politics of selected contemporary movements such as environmentalism, peace, human rights, and feminism. It also provides a comparative analysis of the politics of dissent.

POLI 303 Globalization, Identity and the State (3 credits)

This course examines the impact of globalization on state sovereignty and state autonomy, citizenship, and the underlying social and political processes. It addresses the issue of the changing nature of the nation state, and of identity-based politics.

POLI 305 International Political Economy (3 credits)

This course examines the processes and issues in the politics of international economic relations. Topics covered include the role of multinational corporations, the rise of trading blocs, and the international division of labour.

POLI 306 State and Devolution (3 credits)

This course compares the varied approaches to the devolution of power within the nation state occasioned by centralizing and decentralizing forces. State devolution is considered comparatively within both advanced industrial nations and the newly developed societies.

POLI 307 Regional Integration and the Nation State (3 credits)

This course studies international structural integration. Among the topics covered are: the dynamics of socio-political unification; theories of regionalism; supranational communities; common markets.

NOTE: Students who have received credit for POLI 317 may not take this course for credit.

POLI 308 Canadian Politics and Society (3 credits)

This course presents a comprehensive analysis of the major issues within the Canadian political process and considers the formal and informal institutions within which these issues are addressed. The political system is studied within the context of federalism, the electoral system, political parties, interest groups, public opinion, and the Canadian political culture.

POLI 309 Women and Politics in Canada (3 credits)

This course examines the role of women in Canadian politics at the federal, provincial, and local level. Historical, theoretical, and legal perspectives are examined and include the politics of racism; sexuality; community organizing; suffrage; and representation within formal political structures. It focuses on the diversity and development of the women's movement in Canada.

NOTE: Students who have received credit for POLI 275 may not take this course for credit.

POLI 310 Politics of the U.S. (3 credits)

This course surveys the structures and dynamics that inform the contemporary American political process. In addition to studying the traditional governmental institutions, the course aims to provide a foundation for understanding and critically analysing public opinion, the media and elections, federalism, political parties and interest groups, civil rights and civil liberties, and current issues in public policy.

NOTE: Students who have received credit for POLI 327 may not take this course for credit.

POLI 311 International Public Law (3 credits)

This course explores the meaning, effectiveness, and potential of interstate law. Among the topics covered are: the source and development of international law; the role of the International Court of Justice; sovereignty, territory, and natural resources; human rights violations, the state and war crimes tribunals; and international environmental law.

POLI 315 International Organizations (3 credits)

This course offers an overview of international institutions, including the League of Nations, the United Nations and its agencies, and regional organizations. The course considers whether such institutions are gradually replacing the state as providers of security, and examines theoretical orientations toward international regimes.

POLI 318 Citizen Participation in the Political Process (3 credits)

This course examines the causes and implications of political participation by individuals in Canada. Topics to be covered include citizen participation in election campaigns and elections, party organizations, protest movements, interest groups, lobbying and community associations. The course is organized to answer three basic questions: who participates in politics in Canada, why do they do so, and how do they choose to become involved?

POLI 319 European Politics and Government (3 credits)

This course is a study of government and

politics in selected European countries. It provides an analysis of political institutions, cultures, and processes.

POLI 320 Development of Western Legal Systems (3 credits)

This course is an overview of the major legal systems of the Western world, with special emphasis on the political decisions which influenced their growth and direction. It will study the development of Roman law, Romano-Germanic law, and English common law.

POLI 322 Immigration and Citizenship (3 credits)

This course examines the concepts of equality, rights, citizenship, and public interest and relates these themes to immigration policies in Canada.

POLI 323 Politics of Eastern Europe (3 credits)

This course studies the political process and institutions of the region, with a special focus on the recent transformation relating to economic problems, social structures, culture, and ethnic conflicts, as well as the role of governmental policies in domestic and foreign affairs.

POLI 326 Women, Ethics and the Law in Canada (3 credits)

The course provides an analysis of applied ethics to the study of women and the law in Canada. The course identifies and examines ethical problems addressed by feminist theorists that arise in the realm of public law. Diverse approaches to the study of ethics and the efficacy of legal moral imperatives will be assessed. Ethical issues examined include human rights, family law, pornography, abortion, and reproductive technologies.

NOTE: Students who have received credit for POLI 314 or 334 may not take this course for credit.

POLI 328 Public Policy and the Politics of Equality (3 credits)

This course reviews theoretical debates about the role of the state and the individual, collective and individual rights, integration, and the role of cultural diversity and identity. It examines selected policy demands of women, the poor, refugees, and other constituencies.

NOTE: Students who have received credit for

NOTE: Students who have received credit for POLI 316 or 334 may not take this course for credit.

POLI 329 American Foreign Policy (3 credits)

A course in the role of the United States in the world. The course considers the strategic position and superpower status of the U.S.A. through its foreign policy and its diplomatic relations with other countries.

POLI 330 Principles of Public Administration (3 credits)

This course examines the theory and practice of

public administration in Canada. The nature of accountability in public sector environments is reviewed in order to study how policy is developed, implemented, and evaluated by bureaucracies, central agencies, and the legislative branches of government.

NOTE: Students who have received credit for POLI 260 may not take this course for credit.

POLI 332 Theories of International Relations (3 credits)

This course is an introduction to the field of theories in international relations. It examines the development of knowledge from the classical paradigm to the most contemporary frames of analysis.

POLI 333 *Politics of Russia* (3 credits) This course is a study of the government and politics of the old and the new Russia, including emerging political, social, and economic structures, conflicts, and issues.

POLI 335 *Politics of China* (3 credits) This course focuses on political development of China. Topics include political mobilization, economic development, democracy, and the policy process.

POLI 336 Politics of South Asia (3 credits)

This course comparatively examines the political systems of South Asian countries in light of their socio-economic environment. Specific emphasis is placed on four countries — India, Pakistan, Bangladesh, and Sri Lanka. After a comprehensive study of the social and political structure of these countries, agrarian and industrial policies are evaluated.

NOTE: Students who have received credit for POLI 340 may not take this course for credit.

POLI 337 *Politics of Japan* (3 credits)
This course focuses on the political development of Japan since the end of World War II.
Emphasis is placed on Japanese modernization, post-industrial politics, national security and constitutional pacifism.

POLI 338 Foreign Policy Making and Diplomatic Relations (3 credits)

This course studies the substance, formulation, and implementation of foreign policy in selected countries. Special attention is paid to theoretical frameworks, inputs in decision-making, policy evaluation, diplomatic establishment, diplomatic negotiation, treaty-making, and conference diplomacy.

NOTE: Students who have received credit for POLI 412 may not take this course for credit.

POLI 344 Comparative Political Analysis (3 credits)

This course deals with theoretical aspects of comparative politics. Topics include: terms and

concepts of political analysis; theories of modernization and political development; dependency; corporatism, and state autonomy.

POLI 349 Political and Social Theory and the City (3 credits)

This course examines the theoretical and ideological aspects of city government in historical and normative perspective.

NOTE: Students who have received credit for POLI 336 may not take this course for credit.

POLI 350 Canadian and Québec Law (6 credits)

This course is an introduction to Canadian and Québec law. It emphasizes certain areas of criminal law, the Canadian Charter of Rights and Freedoms, and Québec civil law. An analysis is undertaken of the criminal court structure and criminal procedure, legal constitutional rights; the civil court structure and civil court procedures. NOTE: Students who have received credit for POLI 240 or 241 or 243 may not take this course for credit.

POLI 351 Canadian Federalism (3 credits) This course is a critical and analytical study of the theory of federalism, its principles, and techniques, and the response of Canadian federal systems to the demands of cultural dualism and regional pressures.

POLI 352 Comparative Urban Politics and Government (3 credits)

This course deals with politics and government in selected Canadian cities, with comparative reference to cities elsewhere in the world. NOTE: Students who have received credit for POLI 336 may not take this course for credit.

POLI 355 Nationalism: The Canadian Experience (3 credits)

This course examines the origins and development of nationalism and regionalism in Canada. It compares nationalist and regionalist sentiments in Canada with those of European countries.

POLI 356 Canadian Political Parties (3 credits)

This course provides a comprehensive examination of the origins and development of political parties in Canada at both the federal and provincial levels. Theories about party development, including one party dominance, brokerage politics and third party development, are examined in order to determine the efficacy of political parties.

POLI 361 Government, Society and Public Purpose (3 credits)

This course is an examination of the broad social, economic, political, and cultural forces shaping governmental decisions and policies. Particular attention is paid to the conflict between private and public concerns.

POLI 362 Policy Analysis and Programme Evaluation

(3 credits)

This course provides a basic understanding of various approaches to policy planning and policy evaluation. Special emphasis is placed on various conceptual, methodological, and ethical issues emergent in the evaluation of governmental policy performance.

POLI 363 Issues in Canadian Public Policy (3 credits)

The course examines alternative public policies in selected areas at the federal, provincial, and municipal levels in Canada. Policies analysed vary from year to year and include such areas as: social welfare, culture, education, language, environmental protection, energy conservation, urban renewal, and economic policy.

POLI 364 Hellenistic, Roman, Medieval Political Philosophy (3 credits)

This course examines the political teachings of the Hellenistic schools such as the Academics, the Stoics, the Epicureans and the Skeptics. It traces these teachings through their reception in the republican theory of Cicero. It then follows their transformation into the political thinking of Christian authors such as St. Augustine.

NOTE: Students who have received credit for POLI 270 or 273 may not take this course for credit.

POLI 365 Canadian Public Administration (3 credits)

This course examines the organization and composition of the federal bureaucracy, the role of the bureaucracy in the making and implementation of public policy, patterns of recruitment, and the mechanisms of accountability and control.

POLI 366 *Politics of Africa* (3 credits) This course is a comparative study of political institutions and processes in selected African countries. Countries selected may vary from year to year.

NOTE: Students should consult the departmental handbook for current topic. NOTE: Students who have received credit for POLI 343 or 345 may not take this course for credit.

POLI 367 Québec Public Administration (3 credits)

This course examines the organization and composition of Québec bureaucracy, the role of civil servants and the making and implementation of public policy, patterns of recruitment, and the mechanisms of accountability and control.

POLI 368 Media, Technology and Politics (3 credits)

This course examines the impact upon politics of changes in technology and media, as well as discussing a diverse range of contemporary thinkers and their understanding of the digital

future. Particular attention is paid to the age of electronic politics and its impact upon the actual practice of political power.

NOTE: Students who have received credit for POLI 472 may not take this course for credit.

POLI 371 Early Modern Political Philosophy (3 credits)

This course studies the origins of modern political thought in the thinkers of the Renaissance and the Reformation. It examines the rise of modern individualism in the writings of thinkers such as Machiavelli, Luther, Calvin, Bodin, Hobbes, and Harrington.

POLI 372 Political Science and Scientific Method (6 credits)

This course focuses on contemporary interpretations of reasoning by natural scientists (i.e. empiricism, philosophical relativism and philosophical realism), and inquires into the implications of each of these interpretations for the study of the social sciences in general and political science in particular.

NOTE: Students who have received credit for POLI 382 or 383 or 474 may not take this course for credit.

POLI 373 Late Modern Political Philosophy (3 credits)

This course examines the philosophy of the Enlightenment and its critics, as well as the political thought of the early industrial period. The thinkers studied may include Locke, Montesquieu, Hume, Rousseau, and John Stuart Mill.

POLI 375 Nationalism: Origins, Operation, and Significance (3 credits)

Using specific case studies, this course examines the theories of nationalism developed originally in the early nineteenth century as a purely European phenomenon. It relates the rise of nationalism to the processes of modernization.

POLI 379 Politics of Latin America (3 credits)

This course studies the political structures and processes of selected countries in South America, Central America, and the Caribbean. Countries selected may vary from year to year. NOTE: Students should consult the departmental handbook for current topic. NOTE: Students who have received credit for POLI 346 or 348 may not take this course for credit.

POLI 380 Comparative Public Administration and Bureaucracy (3 credits)

This course deals with the theories and the development of public administration within a comparative context. Using a Weberian framework of bureaucracy, the course critically evaluates the formal-rational concepts of

bureaucracy in relation to case studies of public services in Europe and the new bureaucratic structures developed in other countries. NOTE: Students who have received credit for POLI 360 may not take this course for credit.

POLI 384 Principles of Political Theory (3 credits)

This course is an intensive study of a basic work by a major thinker such as Plato, Aristotle, Machiavelli, Hobbes or Hegel. It examines a major text such as Plato's *Laws* or Hegel's *Phenomenology* as well as commentaries on it, while attempting to explore systematically the issues and problems raised by the text and the interpretative traditions that follow from it. *NOTE: Students who have received credit for POLI 370 may not take this course for credit.*

POLI 386 Contemporary Liberalism and Its Critics (3 credits)

This course discusses the political, cultural, and social consequences of classical liberalism and neo-liberalism from the critical viewpoints of a range of contemporary political thinkers. Themes related to globalization, the meaning of the classical liberal idea of the individual in an increasingly "networked" society, and the triumph of the virtual class are important parts of the discussion.

POLI 387 The American Political Tradition (3 credits)

This course is an examination of documents and texts that shape the origin, development, and relationship between American thought and the American political process. Selected readings from the Declaration of Independence, the Articles of Confederation, the Constitution, the Federalist Papers, Thomas Jefferson, Alexis de Tocqueville and John C. Calhoun, are required.

POLI 388 Human Rights and International Justice (3 credits)

This course surveys normative questions comprising human rights discourse, with an emphasis on international efforts to promote human rights standards. Topics include the role of the United Nations, the North-South debate, environmental security, the obligation of individuals and states, women's rights and the work of non-governmental organizations. Special consideration is given to the controversy between the universal and particular applications of human rights.

POLI 390 Ethics and Competing Political Perspectives (3 credits)

This course focuses on competing ethical perspectives in contemporary political life. A wide range of ethical issues are discussed, which may include, for example, aboriginal claims, pay equity and violence in the media, civil liberties and the Internet, gender debates, reproductive technology, bio-tech and the fate of the "body" in the 21st century. This course seeks to clarify the origins of political thought and the consequences in political practice of clashing ethical perspectives.

POLI 391 Middle East and Global Conflict (3 credits)

This course is a study of the Middle East in transition, conflict and ideology in a global context of changing regional alliances. Topics include regional conflicts such as the Arab-Israeli conflict, the Iraq-Iran war, the Gulf crisis, foreign policy process, and the end of the cold war and its impact in the new millennium.

POLI 392 Survey and Research Design (3 credits)

This course studies the logic and methodology of political science research, the formulation of hypotheses, and the preparation of research design.

NOTE: Students who have received credit for POLI 374 or 376 may not take this course for credit.

POLI 393 Empirical Research Methods (3 credits)

Prerequisite: POLI 392. This course presents quantitative methods of data collection and analysis, and introduces students to SPSS (statistical package for social science).

NOTE: Students who have received credit for POLI 374 or 378 may not take this course for credit.

POLI 394 Globalization and Sustainable Development (3 credits)

This course is an introduction to the emerging field of global environmental politics. It surveys the present environmental crisis and the roles of states, international organizations, and civil society. Various case studies dealing with oceans, forests, fisheries, biodiversity, global warming, and others are used to illustrate the inherent complexity of transnational ecological issues in the era of globalization.

NOTE: Students who have received credit for POLI 385 may not take this course for credit.

POLI 395 Politics of the Middle East (3 credits)

This course is a comparative study of the government and politics of Arab North Africa, the Fertile Crescent, and the Arabian peninsula. Countries and topics covered may vary from year to year. NOTE: Students should consult the departmental handbook for current topic.

POLI 398 Selected Topics in Political Science (3 credits)

POLI 399 Selected Topics in Political Science (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 419 Strategic Studies (3 credits)
Prerequisite: See N.B. number (3). This seminar
deals with military studies and security policies.
It covers the history of military strategies and
theories of war.

POLI 420 Contemporary French Political Thought (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the tradition of French thought, through the writings of a single political theorist, or through a discussion of competing intellectual perspectives. Some of the leading figures discussed are Baudrillard, Deleuze, Guattari, Foucault, Lyotard, Barthes, Camus, Cizous, Irigaray, Sartre, and Virilio. The seminar explores French thought for its contribution to a critical and eloquent analysis of the post-modern scene.

POLI 421 *Transnational Politics* (3 credits)
Prerequisite: See N.B. number (3). This seminar
examines various alternatives such as regime
theory, world systems theory, and emerging
theories about global civil society. It examines
liberal transnationalist thought from Kant to
contemporary understandings of globalization,
including ideas about technological convergence
and renewed cultural divergence. The implications
of non-state-centric perspectives for world politics
and foreign policy are discussed.

POLI 422 Canadian Foreign Policy (3 credits)

Prerequisite: See N.B. number (3). This course examines Canada's foreign policy. In this seminar, particular emphasis is given to the decision-making process by which foreign policy is formulated and implemented, with particular reference to Canadian relations vis-à-vis the United States, the Commonwealth, and the developing countries.

NOTE: Students who have received credit for POLI 359 may not take this course for credit.

POLI 423 Peace Studies and Global Governance (3 credits)

Prerequisite: See N.B. number (3). This seminar focuses on the theory and practice of peace amongst nations. The course begins with a survey of analyses explaining the causes of aggression, war and peace, including theories of structural violence and revolution; nationalism and cosmopolitanism. It then examines the roles played by the state, international organizations, and peace movements, focusing on global and regional disarmament initiatives and peacekeeping.

NOTE: Students who have received credit for POLI 417 may not take this course for credit.

POLI 424 India: State and Societal Relations (3 credits)

Prerequisite: See N.B. number (3). This seminar examines state-societal relations in post-independence India. Topics covered include electoral politics, religious nationalism, economic and social policies, and women and politics in India. NOTE: Students who have received credit for POLI 431 may not take this course for credit.

POLI 433 *Critics of Modernity* (3 credits) This seminar studies selected writings by major critics of modernity during the twentieth century.

The authors studied may include Hannah Arendt, Albert Camus, Fyodor Dostoevsky, George Grant, Bertrand de Jouvenel, Alasdair MacIntyre, Jacques Maritain, Richard Niebuhr, Michael Oakeshott, Leo Strauss, Charles Taylor, and Eric Voegelin.

NOTE: Students who have received credit for POLI 470 may not take this course for credit.

POLI 435 Marxist and Neo-Marxist Political Thought (3 credits)

Prerequisite: See N.B. number (3). This seminar undertakes a critical examination of the major texts of Marx and Engels, and a study of representative selections of Neo-Marxist thinkers such as Gramsci, Althusser, Miliband and Poulantzas.

NOTE: Students who have received credit for POLI 475 may not take this course for credit.

POLI 438 Comparative Provincial Politics in Canada (3 credits)

Prerequisite: See N.B. number (3). This seminar analyses the regional political cultures in Canada; the development of provincial political parties and public administrations, the rise of third parties, and electoral behaviour and provincial public opinion.

NOTE: Students who have received credit for POLI 453 may not take this course for credit.

POLI 461 The State and Economic Life (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the development of the welfare state and the forces contributing to the expansion of government intervention in the economy. Particular attention is devoted to the causal interdependence among values, political power, wealth, the general pattern of social stratification, and economic development.

POLI 463 Government and Business in Canada (3 credits)

Prerequisite: See N.B. number (3). This seminar in public policy is designed to explore the relationship between government and business in Canada. Particular attention is paid to the formation and implementation of policy intended to promote and control enterprise, and the role of government as entrepreneur.

POLI 471 Political Thought and Ideology in Canada (3 credits)

Prerequisite: See N.B. number (3). This seminar explores key Canadian political ideologies: liberalism, conservatism, socialism, populism, and social democracy through the writings of important contributors, past and present, to the tradition of Canadian political thought. The authors studied may include George Grant, Harold Innes and Marshall McLuhan.

POLI 473 Political Theory and Historical Understanding (3 credits)

Prerequisite: See N.B. number (3). This is a

seminar on the relation between historical understanding and political thought. The authors studied may include Hannah Arendt, Michael Oakshott, J.G.A. Pocock, and Quentin Skinner.

POLI 480 Comparative Public Policy (3 credits)

Prerequisite: See N.B. number (3). This seminar is a comparative analysis of some of the major policy problems confronting both industrially advanced and developing societies. The underlying objective of the seminar is to critically evaluate how similar problems are approached by different political systems.

NOTE: Students who have received credit for POLI 462 may not take this course for credit.

POLI 481 Issues in Western European Politics (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the nature of politics of the states and societies of Western Europe, including the significance of their membership in the European Union. NOTE: Students who have received credit for POLI 432 may not take this course for credit.

POLI 482 State and Society in Asia (3 credits)

Prerequisite: See N.B. number (3). This seminar course examines the nature of politics in Asia. A specific focus is placed on selective issues of state-society relations, the emergence of new political forces and institutions in response to changes in the socio-economic structure of the region.

NOTE: Students who have received credit for POLI 434 may not take this course for credit.

POLI 483 State and Society in Latin America (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the nature of politics in Latin America. A specific focus is placed on selective issues of state-society relations, and the emergence of new political forces and institutions in response to changes in the socio-economic structure of the region.

POLI 484 Post-Communist Societies and States in Transition (3 credits)

Prerequisite: See N.B. number (3). This seminar reviews the post-communist states' transition to democracy and their state-formation. The seminar focuses on the interplay between the forces of nationalism, ethnicity, identity, and the transition to democratic structures.

NOTE: Students who have received credit for POLI 437 may not take this course for credit.

POLI 485 Issues in Development and Democracy (3 credits)

Prerequisite: See N.B. number (3). This seminar focuses on the political and economic problems of the new nations. A particular emphasis is placed

on understanding the process of development and state formation within a democratic context.

POLI 486 Advanced Seminar in International Relations

(3 credits)

Prerequisite: See N.B. number (3).

POLI 487 Advanced Seminar in Comparative Politics (3 credits)

Prerequisite: See N.B. number (3).

POLI 488 Advanced Seminar in Canadian and Québec Politics

(3 credits)

Prerequisite: See N.B. number (3).

POLI 489 Advanced Seminar in Public Policy and Evaluation

(3 credits)

Prerequisite: See N.B. number (3).

POLI 490 Advanced Seminar in Political Theory (3 credits)

Prerequisite: See N.B. number (3).

Advanced seminars deal with selected topics in sub-fields of political science. Topics vary from year to year.

NOTE: Students should consult the departmental handbook for a description of these courses.

POLI 496 Honours Seminar (3 credits)

Prerequisite: Permission of the Department. This seminar involves the student in formulating an Honours research proposal, and the research and writing of an Honours paper. Topics of the seminar vary from year to year.

POLI 497 Internship (3 credits)

Prerequisite: Permission of the Department. The internship is a one-semester apprenticeship in some aspect of public affairs and policy analysis. Placements may be drawn from all areas of possible employment, including private sector, government and community organizations. Students are asked to submit a written report which summarizes and evaluates their work experience.

NOTE: Eligible students should have completed 39 credits in Political Science and must have an excellent academic record. The undergraduate committee of the Department will determine the eligibility of the student and will approve the internship. Students should consult the Department for further information.

POLI 498 Advanced Topics in Political Science (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.250

PSYCHOLOGY

Faculty

Chair

JUNE S. CHAIKELSON, Professor

Professor Emeritus
CAMPBELL PERRY

Professors
SHIMON AMIR
ZALMAN AMIT
TANNIS ARBUCKLE-MAAG
JACINTHE BARIBEAU
WILLIAM BUKOWSKI
ANNA-BETH DOYLE
DOLORES PUSHKAR
ALEX E. SCHWARTZMAN
NORMAN SEGALOWITZ
LISA SERBIN
PETER SHIZGAL
JANE STEWART
MICHAEL W. von GRÜNAU

Associate Professors
MICHAEL BROSS
MICHAEL CONWAY
RICK GURNSEY
JAMES E. JANS
REX B. KLINE
JEAN-ROCH LAURENCE
SYDNEY B. MILLER
DAVID MUMBY
JAMES G. PFAUS
DIANE POULIN-DUBOIS
PETER SERAGANIAN
DALE M. STACK
BARBARA WOODSIDE

Associate Professor of Applied Human Sciences and Psychology DOROTHY MARKIEWICZ

Assistant Professors
C. ANDREW CHAPMAN
PATRICIA CROSS
PATRICIA CSANK
ROBERTO DE ALMEIDA
MICHEL DUGAS
OLGA OVERBURY
NATALIE PHILLIPS

Adjunct Professors DAVID ANDRES CHARLENE BERGER WILLIAM BRENDER **GABRIEL BRETON** THOMAS G. BROWN SAM BURSTEIN HALLIE FRANK ALAIN GRATTON THOMAS GRAY ELIZABETH HENRIK ANTHONY HILTON SHEILAGH HODGINS W. RONALD HOOPER HERBERT LADD **GABRIEL LEONARD EVA LIBMAN** GEORGE NEMETH PIERRE-PAUL ROMPRÉ **BRIAN SMITH** JACQUES TREMBLAY ROY A. WISE CAMILLO ZACCIA

Location

Loyola Campus

Psychology Building, Room: PY 146-1

(514) 848-2223

Department Objectives Psychology is the scientific study of mental life, both its neurological bases and its manifestations in behaviour. Psychology also examines the factors that promote change in behaviour and mental activity.

Through teaching and research, the Department serves the community by furthering such knowledge and applying it to promote human welfare. The commitment of faculty members to research assures that students keep up with current developments. Their involvement in community programmes keeps students and faculty alike in close touch with the practical application of the discipline.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

Students must apply to the departmental Honours adviser for formal admission to Honours programmes. The application is usually made after completion of the first-year courses. Students must have a GPA of 3.5 in Psychology courses to qualify for entry to Honours. For additional information concerning programmes and courses, students should consult the Department.

33 Core Programme

- 15 PSYC 310³, 315³*, 320⁶, 358³
- 9 Chosen from PSYC 322³, 326³, 331³, 370³
- 9 Chosen from PSYC 343³, 346³, 349³, 352³

*Students who have completed appropriate Quantitative Methods and Mathematics courses may qualify for exemption from PSYC 315. Application for exemption should be made to the Psychology Department. Students exempted from PSYC 315 will replace the credits with 300-level PSYC.

66 BA Honours in Psychology

- 33 Core Programme
- 6 PSYC 311³, 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 3 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser
- 6 PSYC 421³, 422³
- 6 PSYC 430⁶

66 BSc Honours in Psychology

- 33 Core Programme
- 6 PSYC 311³, 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 3 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser
- 6 PSYC 421³, 422⁵
- 6 PSYC 430⁶

NOTE: In addition students must complete a minimum of 15 science credits outside the Department. The courses must be selected in consultation with a Psychology programme adviser.

NOTE: Students must have completed an appropriate programme of science prerequisites in order to be admitted to BSc programmes.

66 BSc Honours in Psychology (Behavioural Neuroscience Option)

- 33 Core Programme
- 6 PSYC 311³, 316³
- 12 Chosen from PSYC 359³, 361³, 362³, 365³, 367³, 368³, 369³
- 12 PSYC 421³, 422³, 430⁶
- 3 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser

An additional 21 Science credits as specified below:

- 9 CHEM 221³, 222³, 271³
- 3 BIOL 225³ or 226³

9 Chosen from BIOL 225³, 226³, 227³, 261³, 266³, 321³, 335³, 364³, 367³, 383³, 435³, 462³, 483³; CHEM 478³

60 BA Specialization in Psychology

- 33 Core Programme
- 3 PSYC 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 12 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser

60 BSc Specialization in Psychology (Behavioural Neuroscience Option)

- 33 Core Programme
- 3 PSYC 316³
- 12 Chosen from PSYC 359³, 361³, 362³, 365⁶, 367³, 368³, 369³
- 12 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser

An additional 21 Science credits as specified below:

- OHEM 221³, 222³, 271³
- 3 BIOL 225³ or 226³
- 9 Chosen from BIOL 225³, 226³, 227³, 261³, 266³, 321³, 335³, 364³, 367³, 383³, 435³, 462³, 483³; CHEM 478³

60 BSc Specialization in Psychology

- 33 Core Programme
 - 3 PSYC 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 12 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser

NOTE: In addition students must complete a minimum of 15 science credits outside the Department. The courses must be selected in consultation with a Psychology programme adviser.

NOTE: Students must have completed an appropriate programme of science prerequisites in order to be admitted to BSc programmes.

42 BA Major in Psychology

- 33 Core Programme
- 9–12* Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser

*Students who have completed appropriate Quantitative Methods and Mathematics courses may qualify for exemption from PSYC 315. Application for exemption should be made to the Psychology Department. Students exempted from PSYC 315 will replace the credits with 300-level PSYC.

42 BSc Major in Psychology

33 Core Programme

9–12* Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser

*Students who have completed appropriate Quantitative Methods and Mathematics courses may qualify for exemption from PSYC 315.

Application for exemption should be made to the Psychology Department. Students exempted from PSYC 315 will replace the credits with 300-level PSYC.

NOTE: Students must have completed an

appropriate programme of science prerequisites in order to be admitted to BSc programmes.

30 Minor in Psychology

- 12 PSYC 310³, 315³, 320⁶
- 9 Chosen from PSYC 322³, 323³, 326³, 331³, 343³, 346³, 349³, 352³, 358³, 370³
- 9 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology programme adviser

NOTE: Students in programmes leading to the BSc degree are reminded that PSYC 320 and PSYC 391-395 do not count as science credits. All other 300- and 400-level Psychology courses count as science credits.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PSYC 200 Introductory Psychology (6 credits)

This comprehensive survey course introduces the student to the phenomena and terminology encountered in a number of areas of scientific psychology. Topics covered include basic mechanisms of the receptors and nervous system, memory, motivation, perception, learning, abnormal psychology, personality, cognition, and social aspects of behaviour. Lectures and conferences.

NOTE: Students who have received credit for or exemption from Introductory Psychology at cégep or elsewhere may not take this course for credit.

NOTE: Students entering PSYC programmes who have not received credit for or exemption from Introductory Psychology at cégep or elsewhere must take this course, but not for Psychology programme credit.

NOTE: Students who have received credit for PSYC 200 or equivalent may not take MANA 213 for credit.

PSYC 280 Adolescence (3 credits)
Prerequisite: Introductory Psychology or
equivalent. This course deals with various
aspects of adolescence including such topics as
physical change, sexual and sex-related
behaviours, cognitive growth, and lifestyles.
NOTE: Students registered in a Psychology
programme may not take this course for credit.
NOTE: Students who have received credit for
PSYC 379 or 391 may not take this course for
credit.

PSYC 281 Learning Disabilities (3 credits)
Prerequisite: Introductory Psychology or
equivalent. This course deals with selected
aspects of theory and practice related to
learning disabilities including perceptual and
motor disabilities, language disabilities, and
methods of diagnosis and remediation.

NOTE: Students registered in a Psychology

programme may not take this course for credit. NOTE: Students who have received credit for PSYC 377 or 392 may not take this course for credit.

PSYC 283 Emotional Development

(3 credits)

Prerequisite: Introductory Psychology or equivalent. This course focuses on emotional development in childhood. Topics that may be considered include prenatal and genetic influences on emotion, attachment formation, effects of alternative child care, role of father, and poverty. The normal development of anxiety, fear, and affection is discussed. NOTE: This course is intended primarily for students in the Family Life Education Certificate programme (Department of Applied Human Sciences).

NOTE: Students registered in a Psychology programme may not take this course for credit.

PSYC 284 Socialization (3 credits) Prerequisite: Introductory Psychology or equivalent. This course examines socialization processes during infancy, childhood, and adolescence. The effects on socialization of factors such as family structure, disciplinary techniques, and social class are considered. The development of social skills, morality, prosocial behaviour, and aggression are examined. NOTE: This course is intended primarily for students in the Family Life Education Certificate programme (Department of Applied Human Sciences.)

NOTE: Students registered in a Psychology programme may not take this course for credit.

PSYC 286 Psychology of Leisure (3 credits)

Prerequisite: Introductory Psychology or equivalent. This course explores the rapidly developing psychologically-oriented theory and research on leisure and its meaning and importance for the individual. Topics that may be considered include motivation for leisure activities, planning for leisure and/or retirement, therapeutic value of leisure, new conceptions of work and leisure, leisure and self-development. NOTE: Students registered in a Psychology programme may not take this course for credit.

SELECTED TOPICS IN PSYCHOLOGY The 200-level Selected Topics courses (PSYC 297; PSYC 298; PSYC 299) are designed as elective courses for students who are not registered in a Psychology programme. These courses, which have only Introductory Psychology (usually cégep Psychology 102 or PSYC 200) or equivalent as a prerequisite, cover a wide variety of areas of contemporary interest. The particular topics vary from session to session and the material is dealt with in a manner appropriate for students who have minimal formal background in psychology. Students should consult the Psychology Department Course Guide (published yearly) to find out the topic titles for a particular session. NOTE: Students registered in a Psychology programme may not take these courses for credit. The Department also offers 300- and 400-level topic courses for students registered in Psychology programmes. (See below).

PSYC 297	Selected Topics in Psychology (3 credits)
PSYC 298	Selected Topics in Psychology (3 credits)

PSYC 299 Selected Topics in Psychology (6 credits)

PSYC 310 Strategies of Inquiry in Psychology (3 credits)

Prerequisite: PSYC 200 or equivalent; PSYC 315 previously or concurrently. The course describes how information is obtained in modern, scientifically oriented psychology. The variety of means used to understand psychological phenomena and processes is elaborated with reference to particular areas in psychology. Observational, experimental, and correlational techniques are presented in the context of ongoing research. The course emphasizes a conceptual understanding of the procedures that are necessary for developing and evaluating the explanations and theories that we construct to make sense of the diverse phenomena that constitute the domains of modern psychology. Lectures and laboratory.

PSYC 311 Research Experience in Psychology (3 credits)

Prerequisite: PSYC 310; PSYC 315; PSYC 316 previously or concurrently, and permission of the Department. The course introduces students to more advanced methodological issues. The course provides experience in the critical evaluation of research design and methodology.

Students must design, conduct, analyse, and present a report on a brief research project. The course is primarily intended for students who are preparing for graduate school. Lectures and laboratory.

PSYC 315 Statistical Analysis I (3 credits)

Prerequisite: Mathematics A (3 credits) or Quantitative Methods. This course is an introduction to statistics, presented in an experimental psychology context. Topics dealt with include frequency distributions, measures of central tendency and dispersion, the normal curve, correlation, elementary probability theory, an introduction to hypothesis testing, and the *t* test. *NOTE* See §200.7

NOTE: Students who have completed cégep QM 360-300 (Quantitative Methods) and MATH 201-300 (Complementary Topics in Mathematics) with 75% or better grades can be exempt from PSYC 315. Exemptions may be granted on the basis of other courses. Application for exemption should be made to the Psychology Department.

PSYC 316 Statistical Analysis II (3 credits) Prerequisite: PSYC 310; PSYC 315. This

Prerequisite: PSYC 310; PSYC 315. This course builds on the experience derived from PSYC 310 and 315 to advance the student's understanding of hypothesis testing and statistical inferences. The material dealt with includes non-parametric statistics, the chi-square and F-distribution, introductory analysis of variance, and various correlational techniques. *NOTE* See §200.7

PSYC 317 Multivariate Statistical Procedures (3 credits)

Prerequisite: PSYC 310; PSYC 315; PSYC 316, and permission of the Department. Advanced statistical techniques are presented with an emphasis on procedures that allow the use of multiple independent or dependent variables. Examples of specific techniques to be discussed in the course include partial and multiple regression, the analysis of covariance (ANCOVA), and multivariate analysis of variance (MANOVA). The course includes a computer laboratory in which students practice the computation of various procedures with real data sets. Lectures and laboratory.

PSYC 318 Measurement of Individual Differences (3 credits)

Prerequisite: PSYC 310; PSYC 315. A consideration of the general theory of psychological measurement and its application in the development and use of various psychometric instruments such as achievement, intelligence, aptitude, personality, and interest tests. Derived scores, norms, reliability, and validity of these instruments are discussed in the context of general measurement problems in psychology. NOTE: Students who have received credit for PSYC 384 may not take this course for credit.

PSYC 320 Modern Psychology in Historical Perspective

(6 credits)

Prerequisite: Introductory Psychology or equivalent. The course deals with the historical background of psychology from ancient and medieval times up to the present. Early contributions to psychology from the fields of philosophy, physics, physiology, and psychophysics are presented and related to the various schools of psychological thought from the late-nineteenth century to the modern era.

PSYC 322 Fundamentals of Abnormal Psychology (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The course deals with major concepts and issues of abnormal psychology in humans (stigma, traits vs. states, ethics). It studies the major scientific models of diagnosis, etiology, assessment and therapy. It presents the major disorders of the five axes of the DSM system. Social, learning, cognitive, biomedical and psychodynamic approaches to major clinical disorders are studied with emphasis on research and methodology throughout. NOTE: Students who have received credit for PSYC 339 may not take this course for credit.

PSYC 323 Psychopathology: Behaviour Disorders (3 credits)

Prerequisite: PSYC 322. The course presents a focused and thorough treatment of issues in one category of adult psychopathology. Advanced contemporary research and theory covering a wide range of behaviour disorders is presented. Topics studied include disorders of personality, anxiety, mood, psychosexuality, eating, and lifeadjustment. Post-traumatic, psychosomatic, somatoform, and dissociative disorders may also be discussed.

NOTE: Students who have received credit for PSYC 339 may not take this course for credit.

PSYC 324 Psychopathology: Psychotic and Organic Disorders (3 credits)

Prerequisite: PSYC 322. The course presents a focused and thorough treatment of issues in organic-related adult psychopathology. The course deals with advanced contemporary research and theory of various clinical disorders such as the psychoses, schizophrenias and schizophreniform disorders, degenerative disorders, aging disorders, dementias, substance-abuse disorders and psychophysiological disorders. NOTE: Students who have received credit for PSYC 339 may not take this course for credit.

Eating Disorders (3 credits) **PSYC 325** Prerequisite: PSYC 310; PSYC 315. A number of eating problems are reviewed including those resulting in obesity, anorexia nervosa, and/or bulimia. Eating problems are examined from a number of perspectives with emphasis given to

developmental, physiological, and social learning theories. For example, social learning theory will be related to differential development of eating problems in men and women. Treatment of eating problems is studied in relation to behavioural, psychodynamic, and physiological interventions. NOTE: Students who have received credit for

PSYC 398B may not take this course for credit.

PSYC 326 Theories of Personality (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The organization, functioning, and development of personality are discussed from the point of view of the major current theories. Evidence from experiments and field studies are discussed. Socioeconomic, cultural, and biological factors may also be considered.

NOTE: Students who have received credit for PSYC 336 may not take this course for credit.

PSYC 327 Contemporary Issues in Personality (3 credits)

Prerequisite: PSYC 326. The course will critically examine the research and theory concerning a number of selected issues of contemporary interest in the area of personality. NOTE: Students who have received credit for PSYC 336 may not take this course for credit.

PSYC 329 Behaviour Genetics (3 credits) Prerequisite: PSYC 310; PSYC 315. The discipline of behavioural genetics provides a meeting place for the behavioural sciences and genetics. The course provides an introduction to modern ideas concerning the complementary roles of hereditary and environmental influences in the shaping of behaviour. Basic concepts including the foundations of population genetics, transmission genetics and heritability are reviewed. Modern techniques, such as adoption studies and twin studies, are considered. The influence of genetics in areas such as cognition, personality, and psychopathology is explored.

PSYC 331 Social Psychology (3 credits) Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The behaviour of the individual as a member of a larger grouping or society is dealt with. The study of the social influences on individuals or groups involves consideration of topics such as attitude change and development, intra-group communication and problem-solving, leadership, prejudice, development of social movements and cults. NOTE: Students who have received credit for PSYC 333 may not take this course for credit.

PSYC 332 The Self in Social Context (3 credits)

Prerequisite: PSYC 331. The course addresses the wide range of theoretical and empirical approaches to the self in contemporary social psychology. Self-esteem and self-concept are

addressed in terms of personal and social norms, affective experience, and interpersonal behaviour. NOTE: Students who have received credit for PSYC 333 may not take this course for credit.

PSYC 334 Emotion in the Social Context (3 credits)

Prerequisite: PSYC 331. This course addresses models of emotion, individual differences in emotion and mood, and how emotion influences attention, memory, evaluation, and behaviour in the social domain.

NOTE: Students who have received credit for PSYC 333 may not take this course for credit.

PSYC 335 Ethnic Relations (3 credits) Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The course is a survey of various processes underlying intergroup relations (especially ethnic and race). It examines psychological defences, intercultural (in)compatibility, personality factors, and how humans feel about members of their own group vs. members of other human groups, and other species. Cognitive processes that lead to distorted impressions of outgroups are contrasted with those promoting the relatively accurate stereotypes necessary for effective intercultural training. In all of the above, the utility of evolutionary biology as a general frame of reference is considered.

NOTE: Students who have received credit for PSYC 398I may not take this course for credit.

PSYC 343 Motivation I (3 credits) Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. This course reviews and evaluates theories and empirical findings concerning motivation. Topics include the study of motivation in historical perspective, the biological and evolutionary bases of motivation, drive, arousal, and incentive theories of motivation. NOTE: Students who have received credit for PSYC 342 may not take this course for credit.

PSYC 344 *Motivation II* (3 credits)
Prerequisite: PSYC 343. This course is a continuation of PSYC 343; it presents a more focused and thorough treatment of selected topics in motivation. These may include sleep, hunger, sex, aggression, altruism, achievement, pain, fear, and play. Different sections of the course may cover different sets of topics. *NOTE: Students who have received credit for PSYC 342 may not take this course for credit.*

PSYC 346 Learning I (3 credits)
Prerequisite: PSYC 310 and PSYC 315
previously or concurrently. This course reviews
and evaluates theories and empirical findings
concerning basic mechanisms of learning.
Topics include the study of learning in historical
perspective, Pavlovian conditioning, operant
conditioning, reinforcement, stimulus control of
behaviour, and the aversive control of behaviour.
NOTE: Students who have received credit for
PSYC 345 may not take this course for credit.

PSYC 347 Learning II (3 credits)
Prerequisite: PSYC 346. This course is a continuation of PSYC 346; it presents a more focused and thorough treatment of more advanced topics in learning. These may include developmental aspects of learning, animal memory and cognition, human applications of conditioning principles, biological constraints on learning, or the physiology of learning and memory. Different sections of the course may cover different sets of topics.

NOTE: Students who have received credit for

PSYC 349 Sensation and Perception I (3 credits)

PSYC 345 may not take this course for credit.

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. Physiological and psychological bases of sensation and perception. Topics such as pitch perception, colour vision, perception of movement, size, and distance are included. The areas of sensation and perception are integrated through a human information-processing approach to the understanding of audition, vision, and other modalities. NOTE: Students who have received credit for PSYC 348 may not take this course for credit.

PSYC 350 Sensation and Perception II (3 credits)

Prerequisite: PSYC 349. A continuation of PSYC 349. This course examines current topics in the area of sensation and perception with an emphasis on recent research and developments in vision and audition, including areas such as colour vision, space perception, the anatomical and physiological bases of perception, the perception of illusions, and motion perception. Different sections of this course may cover different sets of topics.

NOTE: Students who have received credit for PSYC 348 may not take this course for credit.

PSYC 352 Cognition I (3 credits)
Prerequisite: PSYC 310 and PSYC 315
previously or concurrently. A course that
introduces the general area of cognitive
psychology through the presentation and
discussion of the theoretical and experimental
foundations for our current understanding of
how humans acquire and use knowledge.
Current research findings and theories in the
areas of pattern recognition, attention, memory,
and imagery are surveyed. Following this
introductory course, students should have the
necessary background to pursue advanced
topics in cognition.

NOTE: Students who have received credit for PSYC 351 may not take this course for credit.

PSYC 353 Cognition II (3 credits)
Prerequisite: PSYC 352. A continuation of
PSYC 352 that presents thorough treatments of
topics such as cognitive development,
psycholinguistics, concept acquisition, reading,
speech perception, problem-solving, and
reasoning. Different sections of this course may

cover different sets of topics.

NOTE: Students who have received credit for PSYC 351 may not take this course for credit.

PSYC 358 Fundamentals of Behavioural Neurobiology (3 credits)

Prerequisite: BIOL 200 or BIOL 201 or cégep Biology 301 or cégep Biology 921. The purpose of this course is to introduce students to the neural substrate of behaviour. Topics include the structure and function of neurons as well as neural communication, an introduction to neuro-anatomy and endocrinology, the processing of sensory information, and the control of movement. NOTE: Students who have received credit for BIOL 383, PSYC 357, 360 or 363 may not take this course for credit.

PSYC 359 Neuropsychology (3 credits)

Prerequisite: PSYC 358. The purpose of this course is to introduce students to basic neurology, including the neurological examination, clinical tests, and neurological disorders. The general principles underlying human neuropsychology are discussed, as well as the development of neural functioning and recovery following brain damage.

NOTE: Students who have received credit for PSYC 363 may not take this course for credit. NOTE: Students who have received credit for PSYC 357 or 360 may take this course for credit.

PSYC 361 Neurobiology of Drug Dependence (3 credits)

Prerequisite: PSYC 310; PSYC 315; or six credits from among PSYC 358, 359, 362, 365, 367. This course focuses on the behavioural and pharmacological mechanisms underlying the phenomenon of drug dependence. Concepts such as physical and psychological dependence, tolerance, reinforcement, and aversion are discussed. In addition the role of these concepts in the development of new treatment procedures is assessed.

PSYC 362 Neurobiology of Learning and Memory (3 credits)

Prerequisite: PSYC 346; PSYC 358; or permission of the Department. A number of mechanisms subserving learning and memory are investigated, including models based on relatively simple nervous systems, e.g., conditioning in Aplysia, as well as more complex systems, e.g., the neuronal mechanisms mediating eyeblink conditioning in the rabbit and the neuronal pathways that mediate reinforcement. Other topics may include the anatomical bases of memory, including the role of the hippocampus in spatial memory and the role of the NMDA receptor in learning and memory. NOTE: Students who have received credit for PSYC 357 or 360 may not take this course for credit.

NOTE: Students who have received credit for PSYC 363 may take this course for credit.

PSYC 365 Neurobiology of Sensation and Perception (3 credits)

Prerequisite: PSYC 349; PSYC 358; or permission of the Department. The course examines the relation between the structure of sensory systems and perceptual function. Some of the topics addressed are how the structure of the eye and ear determines how and what we see and hear; the modularity of cortical organization; segregation and integration of visual information; PDP and other models; bottom-up and top-down processing; the reconstruction of the perceptual world. NOTE: Students who have received credit for PSYC 357 or 360 may not take this course for credit.

NOTE: Students who have received credit for PSYC 363 may take this course for credit.

PSYC 367 Neurobiology of Motivated Behaviours (3 credits)

Prerequisite: PSYC 343; PSYC 358; or permission of the Department. The course examines the neural mechanisms mediating motivated behaviour. Topics addressed include the following: pleasure and pain; ingestive behaviour; sexual and reproductive behaviour; aggression; temperature regulation; sleep, arousal, and biological rhythms.

NOTE: Students who have received credit for PSYC 357 or 360 may not take this course for credit.

NOTE: Students who have received credit for PSYC 363 may take this course for credit.

PSYC 368 Neurobiology of Sexual Differentiation (3 credits)

Prerequisite: PSYC 358. This course deals with the genetic and hormonal influences that lead to the sexual differentiation of the brain and behaviour. Mechanisms of chromosomal and neuroendocrine effects on the body and neural circuits, and plasticity are discussed. Animal differentiation as well as normal and abnormal human differentiation are examined. NOTE: Students who have received credit for PSYC 390 may not take this course for credit.

PSYC 369 Hormones and Behaviour (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently; PSYC 358. The course deals with the role of hormones in integrating the activity of various neural, endocrine, and sensory systems to bring about organized, purposeful behaviour. Topics discussed include the reproductive, sexual, or environmentally adaptive systems, with treatment of material ranging from the molecular to the behavioural level.

PSYC 370 Fundamentals of Developmental Psychology (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The course is presented and organized from the perspective

of developmental psychology as a science. Various aspects of psychological development are considered including physical growth, cognitive development, language acquisition and social and emotional development, with a particular focus on development during early and middle childhood. There is an emphasis on research strategy and methodology throughout. Specific lecture topics have been chosen to be representative of landmark research, significant new research trends, contemporary issues, and predominant theories.

NOTE: Students who have received credit for PSYC 330 may not take this course for credit.

PSYC 373 Infancy (3 credits)

Prerequisite: PSYC 370. The course provides a comprehensive account of psychological development in infancy. Aspects of infant development such as physical, perceptual, cognitive, verbal, emotional, and social development are covered. Theoretical perspectives and research methods specific to the study of infant development are emphasized. NOTE: Students who have received credit for PSYC 330 may not take this course for credit.

PSYC 377 Abnormal Development During Childhood (3 credits)

Prerequisite: PSYC 322; PSYC 370. Using principles of developmental and clinical psychology, this survey course focuses primarily on understanding the pathways to abnormal adjustment in childhood. The course covers the roots of social competence/deviance in the early experience and temperament of the child; the assessment of social and cognitive deficits and the efficacy of interventions. Applications to populations of children with special problems are examined. Examples of the special problems include hyperactivity, conduct disorders, overanxiety, learning disabilities, mental retardation, and autism.

PSYC 379 Adolescent Development (3 credits)

Prerequisite: PSYC 370. The course deals with various aspects of development in adolescence. Such topics as hormonal and physical changes, cognitive development (Piagetian, information-processing and psychometric views), the peer group, friendships, parent-adolescent interactions, sex roles and identity formation, sexuality, delinquency, drug abuse, suicide, and psychological disorders in adolescents may be discussed. Whenever possible, developmental issues in adolescence are considered from a cross-cultural as well as historical perspective.

PSYC 380 Aging (3 credits)

Prerequisite: PSYC 370. This course covers recent developments in the psychology of aging with emphasis on research aspects. The topics examined include methodological considerations, the implications of physiological changes due to age on people's behaviour, and the influence of

aging on personality, cognitive processes, coping styles, sex roles, and adjustment. The class will be asked to consider the extent to which psychological changes associated with age are caused by biological processes and by social processes.

PSYC 381 Scaling (3 credits)

Prerequisite: PSYC 310; PSYC 315. The theoretical basis and application of scaling methods in psychophysics and social psychology are studied. Quantitative scales for the measurement of attitudes and sensations are derived and constructed. Other topics that may be covered include subjective estimate methods, the law of comparative judgement, unfolding techniques, and signal-detection theory.

PSYC 385 Personnel Psychology (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. This course focuses on the contributions of psychology to several human resource considerations in organizations. Topics include personnel selection, training methods, personnel appraisal, and career development. Other relevant topics may be discussed depending on student interest. This is an applied area of psychology and therefore the interplay between theory, research, and application is stressed.

NOTE: Students who have received credit for PSYC 375 may not take this course for credit.

PSYC 386 Organizational Psychology (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The theoretical and research interests of industrial psychologists centre on such topics as employee motivation and job satisfaction, leadership and communication in organizations, and organizational development. Other related topics may be covered. This is an applied area of psychology and therefore the interplay between theory, research, and application is stressed.

NOTE: Students who have received credit for PSYC 375 may not take this course for credit.

PSYC 391 Gender in the Social Context (3 credits)

Prerequisite: PSYC 331. The course deals with the issue of how the biological categories of female and male are modified in the social context. It examines the social transformation of biological females and males into gendered individuals from a theoretical and empirical perspective. The development of gender identity, gender role, and the sex vs. gender differences in various areas of psychological functioning such as cognitive behaviour, mental health, and social behaviours are analysed, and their underlying mechanisms examined.

NOTE: Students who have received credit for PSYC 390 may not take this course for credit.

PSYC 392 Health Psychology (3 credits)
Prerequisite: PSYC 310 and PSYC 315
previously or concurrently. Psychological issues
in the promotion of health and the treatment of
illness are explored. Theoretical as well as
empirical contributions to the study of health
promotion and disease etiology are scrutinized.
Biomedical and psychosocial etiological models
of health and disease are examined from
epidemiological and psychological perspectives.
NOTE: Students who have received credit for
PSYC 364 may not take this course for credit.

PSYC 393 Contemporary Issues in Health Psychology (3 credits)

Prerequisite: PSYC 392. This course offers a more focused treatment of selected advanced topics in health psychology. Topics covered may include the following: the relationship between behavioural reactivity and cardiovascular health, illness behaviour, psychological aspects of pain, the role of aerobic exercise in health promotion, psychosocial aspects of substance abuse, and relapse prevention strategies for harm reduction. NOTE: Students who have received credit for PSYC 364 may not take this course for credit.

PSYC 395 Psychology of Language and Communication (3 credits)

Prerequisite: PSYC 310; PSYC 315; or a minimum of three credits from among COMS 240; FRAN 481; LING 200; or permission of the Department. The course deals with the cognitive, developmental, and social aspects of language and human communication. Topics discussed may include psychological consideration of modern linguistic theories, child-language development, second-language development in children and adults, speech perception, biological basis of language, social psychological aspects of human communication. NOTE: Students who have received credit for PSYC 393 may not take this course for credit.

PSYC 396 Foundations of Animal Behaviour (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently; or nine credits in cégep-level Chemistry and Biology courses; or permission of the Department. This course explores the bases underlying the study of animal behaviour as they relate to the study of psychobiology and evolutionary psychology. Topics include methodological considerations, behaviour genetics, theory of evolution, basic sociobiological and ethological concepts. NOTE: Students who have received credit for PSYC 366 may not take this course for credit.

PSYC 397 Contemporary Issues in Animal Behaviour (3 credits)

Prerequisite: PSYC 396. This is a continuation of PSYC 396. The course presents a detailed treatment of topics such as biological reproductive strategies, animal communication, territoriality and aggression, the effects of early experience, comparative animal learning and

cognition, and mechanism of orientation navigation and homing.

NOTE: Students who have received credit for PSYC 366 may not take this course for credit.

SELECTED PROBLEMS IN PSYCHOLOGY
The Selected Problems in Psychology courses
(PSYC 398 and PSYC 399) are designed for
students enrolled in a Psychology programme.
The material is dealt with in a manner that
assumes a background in experimental psychology and, in some cases, specific preparation
through prior completion of a related course.
The minimal prerequisite is PSYC 310
(Strategies of Inquiry in Psychology) and
PSYC 315 (Statistical Analysis I). Students
should consult the Psychology Department
Course Guide (published yearly) for details
concerning available courses.

PSYC 398 Selected Problems in Psychology (3 credits)

PSYC 399 Selected Problems in Psychology (6 credits)

PSYC 400 Advanced Experimental Psychology (6 credits)

Prerequisite: PSYC 310; PSYC 311; PSYC 315; PSYC 316 or equivalent, and permission of the Department. The course provides experience in the design, conduct, analysis, and reporting of independent research in the major areas of psychology. The research is undertaken under the supervision of a faculty member.

PSYC 421 Honours Seminar: Selected Topics in Psychology (3 credits)

Prerequisite: PSYC 311, 316, and permission of the Department. This seminar critically examines current topics in psychology such as learning, perception, cognition, and language. Emphasis is on current theory as it relates to selected topics from these areas.

NOTE: Students who have received credit for PSYC 420 may not take this course for credit.

PSYC 422 Honours Seminar: Selected Issues in Psychology

(3 credits)

Prerequisite: PSYC 311, 316, and permission of the Department. This seminar critically examines current issues in psychology such as social and developmental processes, motivation, emotion, and the biological bases of behaviour. Selected issues from these areas are discussed from theoretical perspectives specific to given phenomena.

NOTE: Students who have received credit for PSYC 420 may not take this course for credit.

PSYC 430 *Honours Thesis* (6 credits) Prerequisite: Permission of the Department. Open to final-year Honours students. This course requires the student to propose and conduct a study and submit a thesis written

according to the APA format. The work is supervised by a thesis chair selected by the student from within the Department.

PSYC 436 Directed Readings in Psychology (3 credits)

Prerequisite: PSYC 311, PSYC 316, and permission of the Department. This course is designed for the advanced student wishing to do independent, individually supervised literature research on a specific topic in psychology. This research culminates in a written paper. Students should have a well-defined topic in mind before registering for this course.

NOTE: Students who have received credit for PSYC 438 may not take this course for credit.

PSYC 439 Directed Research in Psychology (6 credits)

Prerequisite: PSYC 311, PSYC 316, and permission of the Department. Under the supervision of a faculty member, the student carries out an independent research project and reports it in writing. The area of study must be decided upon through consultation with the faculty member.

NOTE: Students who have received credit for PSYC 437 may not take this course for credit.

SPECIAL ADVANCED SEMINARS

Permission of the Department is required for registration in the Special Advanced Seminars (PSYC 498 and PSYC 499). These courses are normally open to Specialization and Honours students who are completing their final 30 credits. The usual minimal prerequisite for these specialized courses is PSYC 310, PSYC 311 (Strategies of Inquiry in Psychology, Research Experience in Psychology) and PSYC 315, PSYC 316 (Statistical Analysis I & II). Because the various topics offered are dealt with in depth at an advanced level, specific preparation through prior completion of a related course may also be required.

PSYC 498 Special Advanced Seminar (3 credits)

PSYC 499 Special Advanced Seminar (6 credits)

31.270

RELIGION

Faculty

LESLIE ORR, Associate Professor

Professors FREDERICK BIRD MICHEL DESPLAND JACK LIGHTSTONE IRA ROBINSON

Hindu Studies Chair T.S. RUKMANI, Professor

Associate Professors ROSEMARY DRAGE HALE NORMA JOSEPH MICHAEL OPPENHEIM

Assistant Professor LYNDA CLARKE

Québec and Canadian Jewish Studies Chair NORMAN RAVVIN

Adjunct Professors HOWARD JOSEPH MARC LALONDE SHEILA McDONOUGH DAVID MILLER SUSAN PALMER JOHN L. ROSSNER

Location

Sir George Williams Campus Annex FA, Room: 101 (514) 848-2065

Department **Objectives**

The Department of Religion is dedicated to the academic study of various faiths and of social and cultural phenomena affected by religions. The curriculum includes the comparative study of many religious traditions of the world. At both the undergraduate and graduate levels, students are encouraged to develop an understanding of at least two religious traditions. Whatever the student's special focus, the informed appreciation of the beliefs and values of other cultures is considered an essential dimension of education for today's world.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

BA Honours in Religion 60

- In a language related to thesis: or in a related discipline such as Anthropology, English Literature, History, Philosophy, Sociology, Theological Studies, Women's Studies
- RELI 211⁶ or 213⁶
- From area of primary concentration*
- From area of secondary concentration*
- RELI elective credits at the 300 or 400 6 level
- 3 **RELI 409**³
- **RELI 410⁶** 6

*See areas of concentration.

42 **BA Major in Religion**

- RELI 2116 or 2136 6
- From area of primary concentration* 21
- From area of secondary concentration*
- RELI elective credits at the 300 or 400 6 level
- **RELI 409**³ 3

*See areas of concentration.

30 Minor in Religion

- 6 RELI 2116 or 2136
- RELI elective credits (chosen in consultation with the departmental adviser)

BA Major in Judaic Studies

- Chosen from Hebrew Language: HEBR 210⁶, 250⁶; RELI 401³, 402³
- 6 RELI 2116 or 2136
- **RELI 220³** 3
- Chosen from RELI 301³, 326³, 327³, 328³ Chosen from RELI 329³, 334³, 335³, 337³, 381³, 391³, 392³, 394³, 395³, 397³ Chosen from RELI 223³, 224³, 302³, 303³,
- 304³, 305³, 306³, 319³, 340³, 341³, 342³
- **RELI 409**³

120 Bi-University Major in Judaic Studies

By agreement between the University and Bar-llan University, Ramat-Gan, Israel, students may be admitted to a 120-credit bi-university programme designed to provide the academic base for prospective teachers in Jewish Studies programmes at the Primary, Elementary, and Junior High

School levels in Canada. Admission to the programme depends upon acceptance by both universities. Successful applicants may spend up to the first 24 months (i.e., two Regular and two Summer sessions) at Bar-llan. The rest of the requirements for the degree must be completed at Concordia while the student is registered in the BA Major in Judaic Studies. Further information on the programme may be obtained from the Department of Religion.

Students interested in the Southern Asia Studies programmes should refer to the description provided in §31.170 (Interdisciplinary Studies) of this Calendar.

Areas of Concentration

A. Asian Religions (21 credits)

- 21 Chosen from RELI 224³, 225³, 226³, 316³, 317³, 319³, 340³, 341³, 342³, 344³, 345³, 346³, 347³, 348³, 349³, 350³, 364³, 383³, 384³, 385³
- B. Christianity (21 credits)
- 3 RELI 223³
- 9 Chosen from RELI 301³, 302³, 303³, 304³
- 9 Christian Studies elective credits at the 300 or 400 level
- C. Judaism (21 credits)
- 6 RELI 220³, 301³
- 6 Chosen from RELI 326³, 327³, 328³
- 9 Judaic Studies elective credits at the 300 or 400 level

Women and Religion (21 credits)

- 3 RELI 233³
- 6 Chosen from RELI 381³, 382³, 383³, 384³, 385³, 386³, 391³, 392³
- 9 Chosen from RELI 372³, 380³, 387³, 388³, 389³, 405³, 406³
- 3 Women and Religion elective credits at the 300 or 400 level

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

RELI 211 Understanding Religion (6 credits)

A systematic and topical introduction to the study of religion. The purpose of the course is to enable the student to articulate and investigate questions about the meaning and nature of religion. Problems discussed include the elements of religious experience, forms of religious expression and interpretation, religious communities and practices, and the questions raised by the contemporary interfaith dialogue. Materials are taken from a variety of religious traditions.

RELI 213 Religious Traditions of the World (6 credits)

A historical and comparative overview of the major religious traditions of the world: Judaism, Christianity, Islam, Hinduism, Buddhism, and Chinese religions, this course examines the religious activities and experiences of both women and men with these religions.

RELI 220 Introduction to the History and Religion of the Jews (3 credits)

This course is designed to give an introduction to the history of the Jewish people from ancient times to the present. It also provides an introduction to the social scientific study of contemporary Jewish practice and belief, including a survey of the rituals, practices, and ceremonies of contemporary Jews. It examines the continuities and changes in Jewish society, institutions, concepts, and traditions through the ages. NOTE: Students who have received credit for RELI 222 may not take this course for credit.

RELI 223 Introduction to Christianity (3 credits)

A basic introduction to Christianity as one of the major religious traditions of the world, this course provides an overall examination of the enduring structures of Christian belief, its central symbols and rituals; it also indicates how they are articulated in both the Eastern and Western traditions.

RELI 224 Introduction to Islam (3 credits) This course introduces students to the life of the prophet Muhammad, and to the teachings of the Qur'an. The historical context of the origins of Islam in Mecca and Medina is studied up to the end of the period of the first four Caliphs. The main emphasis is on a thematic analysis of the contents of the Qur'an.

NOTE: Students who have received credit for RELI 313 may not take this course for credit.

RELI 225 Introduction to Hinduism (3 credits)

This course introduces students to the history and evolution of Hinduism from its early beginnings to the present. It also provides a socio-historic-cultural understanding of many of the practices and beliefs of present-day Hindus by relating them to the development and growth of rituals and ideas such as temples, festivals, pilgrimage and other institutions as well as concepts like Dharma, Karma and Moksha that have kept alive the Hindu faith and in turn have undergone many changes throughout the ages. NOTE: Students who have received credit for this topic under a RELI 298 number may not take this course for credit.

RELI 226 Introduction to Buddhism (3 credits)

This course introduces students to Buddhism, beginning with the life and teachings of Gautama the Buddha, and providing an historical view of Theravada, Mahayana and Vajrayana traditions of Buddhism in India, Southeast Asia and East Asia. Emphasis is laid upon major systems of thought and characteristic institutions (such as monastic orders [Sangha], temples, shrines, pilgrimage sites).

NOTE: Students who have received credit for RELI 350 or 364 may not take this course for credit.

RELI 233 Introduction to Women and Religion (3 credits)

This introduction to the particular problems and issues in the study of women and religion uses case studies from various non-Western traditions. The course presents a survey of the different levels of participation, the complex ritual activities, and the intriguing divine imagery associated with women that are found in many religious traditions. Questions pertaining to the contemporary feminist discourse on such topics as witchcraft, matriarchy, and goddess religions are also explored.

RELI 298 Selected Topics in Religion (3 credits)

RELI 299 Selected Topics in Religion (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 301 Biblical Studies I: The Hebrew Bible (3 credits)

An introduction to the methods and results of biblical scholarship with regard to the history, culture, and religion of ancient Israel. Particular attention is given to the major religious affirmations and theological concepts of the Hebrew Bible that have become central in the subsequent development of Judaism.

RELI 302 Biblical Studies II: Christian Origins (3 credits)

A critical survey of Christian origins, this course focuses on New Testament literature and considers historical setting, history of text, religious and cultural significance. Attention is paid to extra-canonical literature and other relevant sources.

RELI 303 History of Christian Thought I (3 credits)

This critical introduction to Christian thought from the Fathers to 1500 studies both orthodox and heterodox texts placed in full historical context. Students acquire a basic knowledge of Augustine and Aquinas. Authors studied at length may vary from year to year.

RELI 304 History of Christian Thought II (3 credits)

This critical introduction to Christian thought from 1500 to the present studies both orthodox and heterodox texts placed in full historical context. Students acquire a basic knowledge of Protestant and Catholic reformers. Authors studied at length may vary from year to year.

RELI 305 Christian Social History I (3 credits)

This introduction to the social history of Christians from the Church Fathers to 1500 focuses on popular religious belief and practice, the rise of the cult of saints, and the role of images in a pre-literate society.

RELI 306 Christian Social History II (3 credits)

This introduction to the social history of Christianity from 1500 to the present focuses on the interrelationship of ecclesiastical authority, social change, and popular religious practice during the Reformations, the settlements of the New World, the Enlightenment, and the modern era. The course also explores the challenges posed by the encounter between East and West, science, secularization, and post-modernism.

RELI 307 *Christian Mystics* (3 credits) Prerequisite: Second-year standing. Based on the study of key texts, this course offers a historical examination of a range of mystical and ecstatic experiences within the Christian tradition.

RELI 308 Heresy and Dissidence in Christianity (3 credits)

Prerequisite: Second-year standing and three credits in Christianity. This course studies heretical movements and other forms of dissidence, including syncretistic movements.

RELI 309 Development of Christian Ethics (3 credits)

Prerequisite: Second-year standing. The development of Christian ethics is examined against the background of other forms of moral discourse. Topics studied at length include natural law, philosophical ethics, and the ethos of secular societies.

RELI 310 Contemporary Ethical Issues: Personal (3 credits)

This course identifies and analyses ethical issues arising at the personal level today. Issues are discussed in the context of the interrelationship between moral values and religious convictions. Examples of areas that raise ethical and religious questions for personal existence are: affluence, alienation, work, leisure, aging, drugs. NOTE: Students who have received credit for RELI 331 may not take this course for credit.

RELI 312 Contemporary Ethical Issues: Societal (3 credits)

This course identifies and analyses ethical

issues arising from social groups today. In discussing the issues, account is taken of the bearing of religious institutions and traditions upon social attitudes and problems. Examples of problem areas that evoke ethical and religious debate are: economic and social inequality, race relations, violence and war, hunger and poverty, population growth. NOTE: Students who have received credit for RELI 332 may not take this course for credit.

RELI 316 *Medieval Islam* (3 credits)

Muslim life and thought from the eighth to the eighteenth century is studied. Attention is given to legal, philosophical, theological, and mystical thought, and to the ideas of several key religious figures. The reasons for both the successes and failures of Islamic civilization are studied. The main patterns of medieval Islamic social and political life are considered.

RELI 317 Islamic Mysticism (3 credits)
This course focuses on the major themes of
Islamic mystical thought as expressed in
philosophical writings and in poetry.
NOTE: Students who have received credit for
RELI 374 may not take this course for credit.

RELI 319 *Modern Islam* (3 credits)
A study of Islamic religious and social thought in the nineteenth and twentieth centuries. Islamic liberalism, traditionalism, and fundamentalism are compared and contrasted.

RELI 326 Ancient Judaism (3 credits)
The concepts, institutions, and literature of early rabbinic Judaism are viewed against its prerabbinic and biblical backgrounds as well as in the context of contemporary non-rabbinic forms of Judaism and of the world of late antiquity. The course also examines the development of rabbinic systems of thought and law as preserved primarily in the Mishnah, early Midrash, and the Palestinian and Babylonian Talmuds. Consideration is given as well to popular rabbinic beliefs and practices and to early rabbinic mysticism.

RELI 327 Medieval Jewish Thought and Institutions (3 credits)

This course examines the intellectual, religious, and social history of selected Jewish communities during the Middle Ages. Both internal Jewish developments and changing Jewish relations with their non-Jewish neighbours are considered.

RELI 328 Modern Judaism (3 credits)
This course surveys the major historical events, sociological and political forces, and intellectual currents which shaped Judaism in the modern period as well as the ways that Jewish communities responded to these forces. Among the topics explored are Emancipation, forms of religious adjustment, anti-semitism, the experience of Jewish communities in Russia and North America, the Holocaust, and Zionism and the state of Israel.

RELI 329 Israel: Religion and State (3 credits)

This course studies the emergence and development of the state of Israel, from the beginnings of the Zionist movement to the present time. It also explores the major political, social, and intellectual developments in both the pre- and post-state periods. The role of Judaism within the changing state is a primary focus.

RELI 334 The Canadian Jewish Experience (3 credits)

This course examines the Canadian Jewish community from its eighteenth-century origins to the present from the perspectives of modern Jewish and Canadian history.

RELI 335 Selected Topics in Canadian Jewish Studies (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 336 Sephardic Judaism (3 credits) This course studies the social and spiritual life of the various communities within the Sephardi world. Topics include Judaism under Islam; the expulsion and dispersion; Sephardi-Maghrebi Judaism; modern times in Arab lands; Sephardi life in the new world, Europe, and Israel. In addition, the philosophical, Halakhic, biblical, and mystical works of Sephardi Jews are examined. NOTE: Students who have received credit for RELI 352 may not take this course for credit.

RELI 337 The Social Scientific Study of Jewish Communities (3 credits)

Prerequisite: Second-year standing or permission of the Department. By means of the analysis of particular issues, texts, or communities, this course utilizes the methods of the social sciences to analyse Jews and their societies. Issues may include the social scientific analysis of ancient or medieval texts and their social contexts, modern Jewish identity, acculturation in contemporary Israeli society, North American Jewish communities, and Diaspora communities.

RELI 338 Holocaust: Historical Circumstances (3 credits)

This course examines the historical circumstances that made possible the systematic destruction of European Jewry in the years 1939-45, as well as the process of destruction and the Jewish and world responses to that destruction.

NOTE: Students who have received credit for RELI 357 may not take this course for credit.

RELI 339 The Impact of the Holocaust on Religious Thought (3 credits)

This course examines the ramifications of the Holocaust in Jewish and Christian thought. Issues discussed include the problem of evil;

suffering; the election of Israel; God's relation to the course of human events.

NOTE: Students who have received credit for RELI 358 may not take this course for credit.

RELI 340 Hindu Thought and Institutions in the Ancient Period (3 credits)

This introduction to the religious concepts, practices, and institutions of ancient India, is based on the literature of the Vedas, including the Upanisads. The course examines the contribution of various aspects of the Brahmanical tradition to the development of Hinduism, and explores the interaction between religions in the ancient period.

NOTE: Students who have received credit for RELI 320 may not take this course for credit.

RELI 341 Hindu Thought and Institutions of the Classical Period

(3 credits)

This survey of the development of Hinduism in the period 500 B.C.E. to 500 C.E. is based on texts drawn from epic literature and the Sastras. This course also examines the emergence in the classical period of fundamental patterns of Hindu religious practice, social organization, and philosophical enquiry.

RELI 342 Hindu Thought and Institutions of the Medieval Period (3 credits)

This survey of the developments within Hinduism in the medieval period makes special reference to the emergence of sectarian devotional movements (Vaisnava, Saiva, and Sakta traditions) and to the elaboration of religious institutions and philosophical schools.

NOTE: Students who have received credit for RELI 321 may not take this course for credit.

RELI 344 *Hindu Mysticism* (3 credits) This examination of the various experience and practices of Hindu mystics includes a consideration of Yoga and of other philosophical, theological, and devotional mystical traditions.

RELI 345 Major Developments in Modern Hinduism (3 credits)

This course focuses on some of the major personalities and movements that have shaped the character of modern Hinduism. The course examines the ideas and activities of reformers, philosophers, and religious and political leaders, beginning in the nineteenth century, and continuing into the twentieth century, with figures such as Gandhi, and into the present day. The course explores the relevance of the thought and methods of these thinkers and activists to contemporary society in India and in the West.

RELI 346 The Hindu Diaspora (3 credits) This historical examination of the experience of Hindus outside India makes special reference to the situation and activities of Hindus in Canada. This course explores the ways in which Hindus

have attempted to maintain religious practice and cultural identity in pluralistic, non-Hindu societies.

RELI 347 Religion and the Arts in South and Southeast Asia (3 credits)

This introduction to the religious art of South and Southeast Asia makes special reference to Hindu and Buddhist architecture, sculpture, and painting. The course examines the ways in which sacred art is related to myth and symbol, religious values and goals, ritual, religious experience, and social and political realities. NOTE: Students who have received credit for RELI 318 may not take this course for credit.

RELI 348 Religion and Society in South and Southeast Asia (3 credits)

This historical and sociological examination of religion's impact on and intersection with the structures of South and Southeast Asian society, explores such issues as caste and class, gender and family relations, links between religion and the state, and relations between Hindu, Buddhist, and Muslim communities.

NOTE: Student who have received credit for RELI 325 may not take this course for credit.

RELI 349 Religions of China and Japan (3 credits)

This course examines the history of the religious life of the people of China and Japan, exploring the interaction of Confucian, Taoist, Buddhist, and Shinto practices and beliefs. NOTE: Students who have received credit for RELI 316 may not take this course for credit.

RELI 350 Theravada Buddhism (3 credits)

This examination of the early history, doctrine, and practices of Buddhism in India, is based on the Pali Canon, and on the development of Theravada Buddhism in the countries of Southeast Asia up to the present day.

NOTE: Students who have received credit for RELI 314 may not take this course for credit.

RELI 364 *Mahayana Buddhism* (3 credits) This course studies the origins and evolution of the Mahayana Buddhist in India, and the spread and growth of various Mahayana traditions in East Asia. It examines developments in texts, doctrine, philosophy, ethical ideals, practices (worship and meditation), and institutions.

NOTE: Students who have received credit for RELI 315 may not take this course for credit.

RELI 365 Religion and Literature (3 credits)

This course deals with the questions raised for the study of religion by works of literature. An account is given of the recent development of interdisciplinary studies in religion and literature, and of the problems of method that have arisen. The relation between the interpretation of religious language, with its use of myth, parable, symbol

and metaphor, and literary criticism is explored.

318 . RELIGION

RELI 366 Religion and Science (3 credits)
This historical investigation of the reasons for
the conflict between religion and science in
Western culture includes an examination of the
relations between religion and science in
various religious traditions. It also considers the
place of religious resources for contemporary
issues of relationship with the natural world.

RELI 367 Religions in Contact (3 credits)
The experience of pluralism challenges the claim, in many religions, to possess the only true way to salvation. The course studies the historical and contemporary encounters between religions and the various responses generated within these traditions to religious diversity and specifically to each other.

RELI 368 Religion in Native Traditions (3 credits)

This overview looks at the many diverse religious traditions of the First Nations populations in Canada. The course examines the sacred stories, ceremonial patterns, life cycle rituals, and religious activities in their varied expressions. Consideration is given to the historical interaction of native government with religious practices.

RELI 369 Comparative Religious Ethics: West and East (3 credits)

This course identifies the ways in which different religious and ideological traditions from West and East consider and deal with ethical issues. Examples of such traditions are Navaho, Jewish, Christian, Islamic, Hindu, Buddhist, Confucian, Humanist, and Communist. The ethical values and ideals found in these traditions, and their influence upon individual life patterns and social organization, are considered.

RELI 371 Religion and Healing (3 credits)
An examination of the interaction between
religious conceptions and practices on the one
hand and healing arts on the other. The course
considers such phenomena as: shamanism;
healing and Christian shrines; native healing
rites; folk medicine of the Third World; modern
spiritual healing groups; the contemporary
dialogue between established forms of medicine,
psychiatry, and religion in the twentieth century.

RELI 372 The Human Body in Religious Faith and Practice (3 credits)

This study of religious attitudes to the human body focuses on the body as a foundation for religious symbolism, religious community and identity, ritual, and religious experience. The course examines these problems with reference to various religious traditions. Issues examined include purification of the body; eating; mortification and mutilation of the body; attitudes towards dead bodies and physical immortality; attitudes towards bodies as gendered; embodied spirituality and incarnation.

RELI 373 Comparative Mysticism (3 credits)

This comparative study examines primary reli-

gious texts from a variety of mystical traditions. Attention is also given to the methodological problems of definition and the representation of mystical experience raised by such modern thinkers as William James, Evelyn Underhill, R.C. Zaehner, W.T. Stace, Ninian Smart, and Steven Katz.

RELI 375 Religion in Canada (3 credits)
This course examines the role religion has played in the development of Canada as well as its influence in Canadian society, politics, and culture. Attention is paid as well to the interaction of different religious groups in the Canadian context. NOTE: Students who have received credit for RELI 363 may not take this course for credit.

RELI 376 Psychology of Religion (3 credits)

This survey looks at various perspectives and methods used in psychology as they are relevant to understanding the role and value of religion for the individual. The course examines the ideas of such figures as William James, Freud, and Jung, among others, and considers such topics as intense religious experience, conversion, images of God, myth and symbol, ritual, and religious and moral development. NOTE: Students who have received credit for RELI 343 may not take this course for credit.

RELI 378 Death and Dying (3 credits)

This comparative study examines conceptions of death and dying among the major religious traditions. Attention is paid as well to exploring contemporary notions of death and dying both in so far as we are still informed by traditional conceptions and to the extent that, for many, such notions have lost their cogency.

NOTE: Students who have received credit for RELI 370 may not take this course for credit.

RELI 380 Sexuality in the History of Religions (3 credits)

This historical examination looks at the development of attitudes towards sexuality within diverse religious traditions. Topics include human reproduction, gender roles and identity, celibacy, sexual variance, birth control, abortion, and homosexuality.

NOTE: Students who have received credit for RELI 335 may not take this course for credit.

RELI 381 Women and Religion: Judaism (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course explores the status and religious roles of women within the Judaic tradition. Its focus is on the practice of the religion, especially the ritual and legal spheres. The relationship between common practice, popular attitudes, and formal legal principles is examined in order to inquire into issues of gender and religion.

RELI 382 Women and Religion: Christianity (3 credits)

The focus of the course is the role of women

and the conflicting patterns of gender construction in the history of Christianity. Through a critical use of primary and secondary sources, both visual and textual, the course explores the sources of women's power and subordination in order to illuminate the relationship between gender and the Christian tradition.

RELI 383 Women and Religion: Islam (3 credits)

The focus is on the writings of contemporary Muslim women authors, and on the debates relating to gender taking place in many Muslim countries.

RELI 384 Women and Religion: Hinduism (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course examines the roles of women in Hindu religious life. The course focuses particularly on the impact of historical change; on the activities and experience of women in India, in the course of the last three thousand years; and on the relation between Hindu conceptions of "the feminine" and women's situation.

RELI 385 Women and Religion: Buddhism (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course explores the situation, activities, and experiences of women within Buddhism. Using an historical approach, the course examines the circumstances of women in early Buddhism, and traces subsequent developments in India, Tibet, Southeast Asia, the Far East, and the West, up to the present day.

RELI 386 Native North American Women and Their Religious Traditions (3 credits)

In the traditional religious systems of the First Nations people, women have had various roles, status, and experience. This overview of the different traditions includes life cycle rituals and the female perspective, female shamans and leadership, female ancestor and spirit stories, and the construction of gender in tribal society.

RELI 387 Goddesses and Religious Images of Women (3 credits)

This comparative survey of female divinity and feminine imagery studies various religious traditions. Among the issues to be explored are the imaging of goddesses as mothers; the conception of forces like fertility, energy, materiality, and knowledge as feminine; the correspondences and relations between goddesses and women; and the contemporary feminist recovery of the Goddess.

RELI 388 Religious Women: Leaders, Models, and Rebels (3 credits)

This course is an exploration of women's roles in religious traditions around the world — as nuns, teachers, saints, religious authorities and leaders, and founders of new religious movements.

Special consideration is given to the experiences and activities particular to women within various religions, and the way these are linked to women's diverse responses to "establishment" religion — rejecting it, changing it, participating in it, presenting alternatives to it.

RELI 389 Women as Ritual Experts (3 credits)

This comparative examination of the contexts and patterns of women's ritual lives looks at various religious traditions. In addition to considering women's activities in formal or public ritual contexts, this course focuses especially on the importance of women as ritual specialists and authorities in the context of the home.

RELI 391 Women and Jewish History I (3 credits)

This course examines the lives and experiences of Jewish women from the Late Antique period through and including the medieval period. Historical and geographic variations are highlighted as well as the differences between communal standards and individual exploits and accomplishments. Through a critical reading of Jewish historical sources, questions of methodology and scholarship are probed.

RELI 392 Women and Jewish History II (3 credits)

This course examines the lives and experiences of Jewish women in the modern period. The immigration to North America and the subsequent development of the Jewish community provides the framework for investigating Jewish women's contribution to and encounter with modern Jewish life. The development of Jewish feminism and the consequent changes amongst the different denominations completes this survey.

RELI 393 Special Topics in Religion and Culture (3 credits)

Prerequisite: Permission of the Department. This course affords an opportunity for the advanced student to study a special theme or problem in religion and culture.

RELI 394 Studies in Judaic Law (3 credits)

Prerequisite: RELI 220 or 326 or 327. By means of the analysis of particular issues and texts, this course explores the history and character of Judaic Law. Attention is given to the literatures, institutions, and social contexts out of which Judaic Law has developed.

RELI 395 Studies in Jewish Philosophy (3 credits)

Prerequisite: RÈLI 220 or 327 or 328. By means of the analysis of particular issues, thinkers, and texts, this course explores the character of Jewish philosophy. Issues in Jewish philosophy that may be examined include the relationship between faith and reason, the understanding of God, Judaism and the inter-human, the powers and limits of philosophical understanding.

RELI 397 Studies in Jewish Mysticism (3 credits)

Prerequisite: RÈLI 220 or 326 or 327. This survey of the Jewish mystical tradition places emphasis on the study of representative Jewish mystical texts. It includes the development of the messianic idea, Merkava mysticism, Hasidei Ashkenaz, Kabbala in Provence and Spain, Lurianic Kabbala, Sabbatianism, and Hasidism. NOTE: Students who have received credit for RELI 354 may not take this course for credit.

RELI 398 Selected Topics in Religion (3 credits)

RELI 399 Selected Topics in Religion (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 401 Studies in Classical Hebrew Texts (3 credits)

Prerequisite: HEBR 210, 250; or permission of the Department. A reading of representative selections of classical Hebrew texts. Attention is paid to the historical and philosophical background of the texts.

RELI 402 Studies in Modern Hebrew Texts (3 credits)

Prerequisite: HEBR 210, 250; or permission of the Department. A reading of representative selections of modern Hebrew literature as well as modern Hebrew scholarship.

RELI 403 Questions from the Christian Tradition (3 credits)

Prerequisite: Six credits in 300-level Christian Studies courses. This thematic study examines enduring religious questions and controversies in the history of Christian West, such as faith and reason, history and eschatology, freedom and authority.

NOTE: Students who have received credit for RELI 362 may not take this course for credit.

RELI 404 Questions on Christianity and Modernity (3 credits)

Prerequisite: Six credits in 300-level Christian Studies courses. The course examines some aspects of the complex relationship between Christianity and the modern ethos. Topics include individualism, secularisation, postmodernism.

RELI 405 Approaches to the Study of Women and Religion: Advanced Seminar (3 credits)

Prerequisite: Six credits in Women and Religion courses. This examination of the work of various feminist theoreticians and theologians explores

how their theoretical insights may be applied to the practice of doing research on women in religion. The course examines feminist reactions to, critiques of, and approaches to understanding historical religions, and explores ways in which these responses produce new ideas about sources to use and questions to ask in our study of these religions, and new possibilities for the meaning and relevance of religion.

RELI 406 Feminist Hermeneutics and Scripture (3 credits)

This feminist critical reading of sacred texts focuses on the rediscovery of women in holy scriptures. This course is for the advanced student able to work with primary sources. Different texts may be considered such as Hebrew Bible, New Testament, Koran, Hindu and Buddhist scriptures.

RELI 409 Methodology and the Study of Religion (3 credits)

This course examines the various methodological approaches that inform the comparative study of religion. Questions investigated pertain to the collection and interpretation of evidence, the types of resources available and techniques used, the complex differences between men's and women's religious experiences and expressions, as well as the impact of significant theoretical approaches on the analysis of religion.

RELI 410 Honours Seminar (6 credits)

Prerequisite: Honours standing in Religion or Judaic Studies. The student works with an individual faculty member in a particular field of religious or Judaic studies. Students are asked to produce a sustained piece of written work to be read by their adviser and at least one other member of the Department.

NOTE: Students who have received credit for RELI 499 may not take this course for credit.

RELI 493 Religious Institutions (3 credits)

Prerequisite: Permission of the Department. Seminar on a particular period or institution in the history of religion.

RELI 495 *Religious Thinkers* (3 credits) Prerequisite: Permission of the Department. Seminar on a particular thinker or school of thought in the history of religion.

RELI 498 Advanced Topics in Religion (3 credits)

RELI 499 Advanced Topics in Religion (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.300 SCIENCE AND HUMAN AFFAIRS

Faculty

Director

ANDREW WAYNE, Associate Professor

Location

Sir George Williams Campus Annex PR, Room: 202 (514) 848–2500

Programme Objectives

The Science and Human Affairs programme explores the social dimensions of science and technology. It provides an interdisciplinary examination of the cultural, economic, political, ethical, and environmental aspects of scientific and technological change. The curriculum is organized into three streams: the history and philosophy of science, the social and ethical aspects of science and technology, and the human dimensions of environmental change.

The programme prepares students for the growing number of non-science careers requiring an understanding of scientific research, technical innovation, and industrial development as well as an understanding of their social implications. It also provides science and engineering students with the opportunity to explore the social dimensions of their disciplines.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

Students should consult with the programme coordinator prior to registering for Science and Human Affairs courses.

- 60 BA Specialization in Science and Human Affairs (See Note 1)
- 12 SCHA 203³, 204³, 250³, 251³
- 3 Chosen from ECON 221³; GEOL 325³; PSYC 315³; SOCI 212³, 213³
- 9 Chosen from PHYS 210⁶; BIOL 200⁶, 201³ or CHEM 205³, 206³, 208³, with not more than six credits in any single discipline
- 18 SCHA 353³, 354³, 355³, 356³, 453⁶
- 12 Chosen from SCHA 260³, 351⁶, 452⁶, or cognates from list below*
- 6 SCHA 454⁶

NOTE 1: Beginning January 1, 1997, no new students will be admitted into this programme. Courses will continue to be scheduled to meet the needs of students in the programme.

- 42 BA Major in Science and Human Affairs**
- 12 SCHA 203³, 204³, 250³, 251³
- 3 Chosen from ECON 221³; GEOL 325³; PSYC 315³; SOCI 212³, 213³
- 9 Chosen from PHYS 210⁶; BIOL 200⁶, 201³ or CHEM 205³, 206³, 208³, with not more than six credits in any single discipline

- 12 Chosen from SCHA 260³, 351⁶, 353³, 354³, 355³, 356³, 452⁶, 453⁶, or cognates from list below*, with at least six SCHA credits
- 6 SCHA 454⁶
- 30 Minor in Science and Human Affairs**
- 12 SCHA 203³, 204³, 250³, 251³
- 18 Chosen from SCHA 260³, 351⁶, 353³, 354³, 355³, 356³, 452⁶, 453⁶, 454⁶, or cognates from list below*, with at least six SCHA credits

*Cognates relating to the history and philosophy of science include: BIOL 321; GEOG 391; GEOL 208; MATH 215, 397; PHIL 328, 329, 421; PSYC 320; SOCI 406, 407; SCOL 251, 252, 253, 270. Those more broadly concerned with science and society include: BIOL 210; POLI 363; ANTH 325.

Cognates treating environmental issues include: ECON 391, 396; GEOG 211, 271, 317.

**Admission suspended for 2000-01.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SCHA 203 (also listed as GEOG 203) Canadian Environmental

Issues (3 credits)

This course explores a number of contemporary

and controversial environmental issues in Canada. It provides a general overview of the policy context of environmental decision-making, focusing in particular on the involvement of

aboriginal groups in natural resource management and the role of various levels of government, non-government organizations, the news media and the international community in sharing Canadian environmental policies. Issues explored in the course include national parks, animal rights, fisheries management, and northern development and environmental impact assessment. NOTE: Students who have received credit for GEOG 203, INTE 254 or SCHA 254 may not take this course for credit.

SCHA 204 (also listed as GEOG 204) Global Environmental Issues

(3 credits)

This course examines a number of global issues from an interdisciplinary perspective. The complex interactions and interdependencies among the biophysical, socio-economic, political, and cultural aspects of global environmental change are explored in relation to issues such as global warming, desertification, deforestation, declining biodiversity, and acid rain.

NOTE: Students who have received credit for GEOG 204, INTE 253 or SCHA 253 may not take this course for credit.

SCHA 250 Introduction to Science and Human Affairs I (3 credits)

The social and historical context of scientific and technological change. The reciprocal interactions of science with government, ideology, economic development, religion, literature, and social theory; science and the city; science and the control of human life; science and human liberation: new definitions of scientific responsibility may be considered. NOTE: Students who have received credit for INTE 250 or PHIL 220 or 228 may not take this course for credit.

SCHA 251 Introduction to Science and Human Affairs II (3 credits)

A continuation of SCHA 250. This course may be taken independently.

NOTE: Students who have received credit for INTE 251 prior to 1990-91 may not take this course for credit.

SCHA 260 Science and Culture in the Western Tradition (3 credits)

Surveys the place of science in Western culture from the ancient Greeks until the present day. The aim of the course is to acquaint a nonspecialist audience with how a scientific worldview has profoundly shaped modern-day society.

SCHA 298 Selected Topics in Science and Human Affairs (3 credits)

SCHA 299 Selected Topics in Science and Human Affairs (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCHA 318 (also listed as PHIL 318) Philosophy of Biology (3 credits)

Prerequisite: PHIL 220, or permission of the Department. This course examines a variety of philosophical issues in biology. Topics covered may include: fitness, function, units of selection, the nature of species, reductionism, biological explanation of human behaviour and the ethical and epistemological consequences of evolutionary theory.

NOTE: Students who have received credit for PHIL 318 may not take this course for credit.

SCHA 351 Astronomy, Cosmology and the Space Age (6 credits)

The nature of the universe as interpreted by relevant scientific theories; cosmology and the shape, size, and structure of the universe; possibility of intelligent life in the universe; social implications of space flight. NOTE: Students who have received credit for INTE 351 prior to 1990-91 may not take this course for credit.

SCHA 353 Science and Society: From Ancient Times Until 1789

(3 credits)

Prerequisite: SCHA 250; SCHA 251, or permission of the director. This course surveys the history of science from the ancient Greeks until the French revolution, with an emphasis on the social history of science.

SCHA 354 Science and Society: Since 1789 (3 credits)

Prerequisite: SCHA 250; SCHA 251, or permission of the director. This course surveys the history of science from the French revolution until the present day, with an emphasis on the social history of science.

SCHA 355 Technology and Society: From Ancient Times Until 1780 (3 credits)

Prerequisite: SCHA 250; SCHA 251. This course deals with the social role and impact of technology from the ancient Greeks until the industrial revolution.

Technology and Society: **SCHA 356** Since 1780 (3 credits)

Prerequisite: SCHA 250; SCHA 251. This course deals with the role and impact of technology in Western society from the industrial revolution until the present.

SCHA 398 Selected Topics in Science and Human Affairs (3 credits)

SCHA 399 Selected Topics in Science and Human Affairs (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCHA 452 Advanced Study in the History of Science (6 credits)

Prerequisite: Permission of the director. Seminar in a specific question in the history of science. The emphasis is on encouraging students to conduct historical investigation on their own under a professor's guidance. The specific content varies from year to year depending on the instructor.

SCHA 453 Science and Public Policy (6 credits)

Prerequisite: SCHA 250; SCHA 251, or permission of the director. This course deals with those public policy issues which involve a major component of science and technology, i.e., energy, environment, resources, health, etc. The course also covers the general relationships of science and government relating to the making of science and technology policy particularly emphasizing the Canadian context, but including such topics as technology aid and transfer. NOTE: Students who have received credit for INTE 453 prior to 1990–91 may not take this course for credit.

SCHA 454 Seminar in Science and Human Affairs (6 credits)

Prerequisite: Six credits from SCHA 353, 354, 355, 356 and enrolment in Major or Specialization in Science and Human Affairs, or permission of the director. This seminar affords an

opportunity for intensive examination of an explicitly interdisciplinary theme.

NOTE: With the permission of the director, students may take this course twice for credit provided that a different subject is dealt with the second time, and will register under SCHA 455. NOTE: Students who have received credit for INTE 454 prior to 1990–91 may not take this course for credit.

SCHA 455 Seminar in Science and Human Affairs (6 credits)

Prerequisite: Permission of the director.

NOTE: Students who have received credit for SCHA 454 may register for SCHA 455 provided the subject matter is different.

NOTE: Students who have received credit for INTE 455 prior to 1990–91 may not take this course for credit.

SCHA 498 Advanced Topics in Science and Human Affairs (3 credits)

SCHA 499 Advanced Topics in Science and Human Affairs (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.310 SOCIOLOGY AND ANTHROPOLOGY

Faculty

Chair

ANTHONY J. SYNNOTT, Professor

Sociology

Professor

WILLIAM C. REIMER

Associate Professors
DANIELLE GAUVREAU
EFIE GAVAKI
GUY LeCAVALIER
GREG NIELSEN
BRIAN M. PETRIE
FRANCES SHAVER

Assistant Professors CARY BOUCOCK NEIL GERLACH Adjunct Professors JOHN P. DRYSDALE E. SUSAN HOECKER-DRYSDALE JOHN D. JACKSON JOSEPH SMUCKER

Anthropology

Associate Professors
CHANTAL COLLARD
HOMA HOODFAR
DAVID HOWES
CHRISTINE JOURDAN
MARIE-NATHALIE LEBLANC
DOMINIQUE LEGROS

Sociology and Anthropology

Associate Professors VERED AMIT-TALAI SALLY COLE

Location

Loyola Campus

Vanier Extension, Room: VE 223

(514) 848-2155

Sir George Williams Campus

J.W. McConnell Building, Room: LB 681

(514) 848-2140

Department Objectives

Sociology and Anthropology examine the processes of social and cultural life in diverse human societies, past and present. These core disciplines of the social sciences are closely linked to the humanities, since various aspects of culture and society concern them all.

The celebration of diversity — cultural, ethnic, and racial — among the students and faculty as well as in the subject matter, is a hallmark of the Department. It offers a full range of undergraduate programmes, including joint programmes in both disciplines.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

60 BA Honours in Sociology

- 3 SOCI 2033*
- 6 SOCI 212³, 213³
- 3 200-level ANTH credits
- 6 SOCI 300⁶
- 6 SOCI 408⁶
- 6 SOCI 409⁶
- 6 SOCI 410⁶
- 24 SOCI elective credits (maximum of six credits at the 200 level)

60 BA Specialization in Sociology

- 3 SOCI 203³*
- 6 SOCI 212³, 213³
- 3 200-level ANTH credits
- 6 SOCI 300⁶
- 6 Chosen from SOCI 310⁶, 315⁶, 410⁶
- 6 SOCI 408⁶
- 24 SOCI elective credits (maximum of six credits from the 200 level)
- 6 400-level SOCI credits

60 BA Joint Specialization in Anthropology and Sociology See Anthropology

42 BA Major in Sociology

- 3 SOCI 203³*
- 3 SOCI 212³
- 3 200-level ANTH credits
- 6 SOCI 300⁶
- 6 Chosen from SOCI 310⁶, 315⁶
- 21 SOCI elective credits (maximum of nine credits from the 200 level)

42 BA Major in Community and Ethnic Studies

- 12 ANTH 202³; SOCI 203^{3*}, 212³; ANTH/SOCI 230³
 - Chosen from ANTH 311³, 312³; SOCI 300⁶
 - O Chosen from ANTH 303³; SOCI 331³, 336³, 352³, 437³; ANTH/SOCI 276⁶, 315⁶, 341³, 353³, 381³, 383³
- 3 Chosen from cognate courses outside the Department which reflect an appropriate cross-cultural perspective and/or subject matter. This course will be chosen in consultation with the Director of the Centre for Community and Ethnic Studies.
- 12 ANTH/SOCI 432⁶, 451⁶

- Minor in Sociology 30
- 3 SOCI 2033*
- 200-level SOCI credits
- Chosen from SOCI 300⁶, 310⁶, 315⁶ 6
- 6 SOCI elective credits
- 300-level SOCI credits

*Students exempted from SOCI 2033 are required to take three credits from SOCI 200- or 300-level courses.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

NR.

- (1) 300-level courses are open to students who have successfully completed SOCI 203 or equivalent, plus at least three credits of 200-level Sociology courses. Students in related disciplines who wish to take cognate courses in Sociology may apply to the Sociology undergraduate adviser for waiver of prerequisites on the basis of equivalent background.
- (2) 400-level courses are open to students who have successfully completed at least six credits from 300-level SOCI courses.
- (3) Entry requirements for Sociology/Anthropology cross-listed courses depend on the discipline through which the course is entered. Once students have taken a cross-listed course under one disciplinary designation they may not take the course under the corresponding designation in the other discipline for credit.

SOCI 203 Introduction to Society (3 credits)

An introduction to the sociological study of society. The course begins with a consideration of the concepts, models, and methods used by sociologists. This is followed by an examination of selected substantive areas of social life, ranging from the relations between individuals and groups to total societies.

SOCI 212 Statistics I (3 credits)

Priority to enrol in this course is given to students who are in a Sociology or Anthropology programme. This course provides an introduction to the basic principles of statistics for social scientists. Topics include the concept of the level of measurement, standardization, the interpretation of graphs, measures of univariate distributions, cross classification, elementary measures of association, the logic of controls, and the basic principles of inferential statistics. The emphasis is on the implications of these statistical techniques for theoretical understanding of sociology and anthropology. NOTE See §200.7

SOCI 213 Statistics II (3 credits)

Prerequisite: SOCI 212. Priority to enrol in this course is given to students who are in a Sociology or Anthropology programme. Students are encouraged to take SOCI 212 immediately preceding SOCI 213. This course is designed to follow Statistics I. Topics include measures of association, the principles of probability and sampling distributions, hypothesis testing, and tests of significance. The emphasis is on the implications of these statistical techniques for theoretical understanding in sociology and anthropology. NOTE See §200.7

Social Organization (3 credits) **SOCI 220** Examines the basic characteristics of societal organization through the use of comparative and evolutionary perspectives. Conceptual analysis of specific forms of and changes in the comprehensive pattern of social organization.

SOCI 230 Race and Ethnic Relations (3 credits)

Prerequisite: See N.B. number (3). Race and ethnicity are examined as bases of social differentiation. Ethnic group relations are analysed in relation to stratification and the exercise of power. The course further involves exploration of the phenomena of discrimination, prejudice, and intergroup accommodation.

SOCI 244 Sociology of Leisure (3 credits) The course examines the effects of social. economic, and political institutions upon the structure and use of leisure time. The emphasis is upon historical changes and the implications of alienation, anomie, and inequality. NOTE: Students who have received credit for SOCI 344 may not take this course for credit.

Social Problems (3 credits) Consideration of a range of social problems from a sociological perspective. Examination of the process by which "social problems" are socially defined and recognized.

SOCI 262 Social Deviance (3 credits) Attention is focused on various forms of anti-social behaviour, particularly those that are socially induced. This course examines the nature, forms, sources, functions, and dysfunctions of deviations from social norms, and the mechanisms of social order and control. Deviance is viewed as a social process of interaction and

relationships that derive from the social structure and have consequences for it. Various forms of deviance are considered in terms of contemporary social theory and research.

SOCI 263 Juvenile Crime and Delinquency (3 credits)

This course examines the nature of juvenile crime and delinquency and their social causes and consequences. Juvenile crime and delinquency, as special kinds of deviance, receive the focus of attention, with emphasis on criminal justice, juvenile justice, criminal behaviour systems, and social policy on juvenile crime and delinquency.

SOCI 264 Sociology of Sport (3 credits) This course provides a systematic analysis of the social influences upon sport in North America. Special attention is directed to the interrelationships between sport and various social institutions.

SOCI 274 The Sociology of Aging (6 credits)

This course examines the changes in society and in living conditions as populations and people age. The sources and the effects of these changes are looked at in the light of several substantive areas and in terms of their implications for social policy. While the major emphasis is on the Canadian experience, some comparative materials are used to widen the perspective.

SOCI 275 Self and Society (6 credits)
This course studies the basic concepts and theories regarding social definitions of the Self.
Emphasis is placed on ideas regarding personality, motivation, and interpersonal attitudes, viewed in terms of the interplay between actors and social structures.

NOTE: Students who have received credit for SOCI 370 may not take this course for credit.

SOCI 276 Gender and Society (6 credits) Prerequisite: See N.B. number (3). This course explores the social construction of gender categories both historically and in the present. The focus is upon examining the various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities. NOTE: Students who have received credit for SOCI 372 may not take this course for credit.

SOCI 280 Québec Society (6 credits)
Focus upon the historic changes in Québec society, with emphasis upon the period following the Second World War. Examination of issues which have provoked conflicting interpretations, including the Conquest, the nature of Confederation, Québec nationalism, and the language question.

SOCI 282 Canadian Society (6 credits)
Analysis of Canadian social structure and change;
the relation of the whole of Canadian society to

its constituent elements; the relation of Canadian society to its international environment.

SOCI 298 Selected Topics in Sociology

(3 credits)

SOCI 299 Selected Topics in Sociology

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

SOCI 300 Classical Social Theory

(6 credits)

Prerequisite: See N.B. number (1). This course involves an examination of the origins of sociology and of the sociological works of nineteenthand early twentieth-century European theorists, with consideration of the social and political context. Particular emphasis is given to the works of Durkheim, Marx, and Weber. Readings include primary sources and critical commentaries.

SOCI 310 Research Methods (6 credits)
Prerequisite: See N.B. number (1); SOCI 212.
This course aims at introducing the students to the concepts, language, and techniques of quantitative and qualitative research methods. It familiarizes the students with the initiation of research problems, the gathering of accurate data, their statistical analysis, and the interpretation and reporting of research findings. This course also introduces the student to the computer use of SPSSX.

SOCI 315 Field Research (6 credits)
Prerequisite: See N.B. numbers (1) and (3).
This course provides the opportunity to study and practise qualitative research methods as they are used by sociologists and anthropologists. Students are taught systematic procedures for the collection of primary data using methods that include participant-observation and formal and informal interviewing.

NOTE: Students who have received credit for SOCI 313 or 314 may not take this course for credit.

SOCI 323 Economy and Society

(3 credits)

Prerequisite: See N.B. number (1). This course examines the ways in which economic activities are legitimated or otherwise affected by social norms and values, and of the ways in which various social systems react to the strains created by the accommodation of new technology and of new industrial organizations.

SOCI 325 Social Change (3 credits)

Prerequisite: See N.B. number (1). This course examines the sources, mechanisms, and consequences of social and cultural change. Classical and contemporary theories of change are analysed, as well as significant empirical studies.

SOCI 331 Social Stratification (3 credits) Prerequisite: See N.B. number (1). This course examines the dynamics of social stratification and differentiation, including economic distinctions and their consequences, social status, power, and mobility. Emphasis is placed upon Canadian society.

NOTE: Students who have received credit for SOCI 330 may not take this course for credit.

SOCI 333 Political Sociology (3 credits) Prerequisite: See N.B. number (1). This course is concerned with the nature, organization, distribution, determinants, and consequences of power in social systems.

SOCI 336 Collective Behaviour (3 credits) Prerequisite: See N.B. number (1). This course is concerned with the nature, emergence, and dynamics of short-term collective behaviour. Classical and contemporary interpretations of collective behaviour are examined. The course focuses on events such as riots and the emergence of violence in demonstrations related to current social problems and issues in Canada and the United States.

SOCI 338 Sociology of Religion (3 credits)

Prerequisite: See N.B. number (1). This course presents an overview of the role of religion in society as found in the pertinent literature of sociology and anthropology. Special consideration is given to the relationship between religion and other social institutions, with particular attention to changes in the religious structures and practices in modern pluralistic societies.

SOCI 341 Migration and Labour Markets (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course investigates labour markets in both Canadian and international contexts with particular emphasis on the integration of migrants, ethnic groups, and visible minorities. An important focus of the course is on the way these groups have acted as agents of change in restructuring labour markets.

SOCI 342 Sociology of Occupations (3 credits)

Prerequisite: See N.B. number (1). This course examines the role played by occupations and the world of work in industrialized societies. Economic, social, psychological, and moral attributes of occupations are examined in relation to changing markets for labour. Specific problem areas to be covered include changes in the structure of professions, the effects of changing technology and organizational design on occupational requirements, issues in work and household demands, issues in employment equity and problems of unemployment. NOTE: Students who have received credit for SOCI 343 may not take this course for credit.

SOCI 346 Industrialization (3 credits) Prerequisite: See N.B. number (1). This course examines processes of industrialization. Analyses are directed primarily towards the Canadian experience and include a consideration of theories regarding industrialization in Canada; an examination of the social and economic impact of large-scale enterprises; the changing role of governments; the ongoing interaction between social organization and advanced technology; and contemporary thought on the social consequences of economic crises.

SOCI 347 Sociology of Labour-Management Relations (3 credits)

Prerequisite: See N.B. number (1). This course involves the study of the shifting patterns in labour-management relations with a special focus on Canada. The course includes analyses of theories of management; the impact of the labour union movement, changes in the nature of the labour market; the significance of the growth of the service sector; the changing role of governments in labour-related issues; and contemporary thought on new forms of industrial organization.

SOCI 352 Ethnicity and Population (3 credits)

Prerequisite: See N.B. number (1); SOCI 212. The course provides an introduction to the basic principles, issues, data, and methods of population studies through a critical exploration of the relationship between ethnicity and population. The emphasis is on how demographic processes (fertility, mortality, and migration) are affected by ethnic factors and on how differential dynamics contribute to shape the ethnic composition and stratification of populations.

SOCI 353 Community Studies (3 credits) Prerequisite: See N.B. numbers (1) and (3): or permission of the Undergraduate adviser. This course involves the study of communities both as locales and as symbolic constructions. The major theoretical approaches used in community studies are evaluated in relation to research and applied interests. Special attention is given to sensitizing students to issues concerning gender, race, ethnicity, and class at the community level.

Urban Regions (3 credits) **SOCI 355** Prerequisite: See N.B. numbers (1) and (3). This course reviews the work of anthropologists and sociologists in cities. The focus is on the social organization of social life in First and Third World urban spaces. Consideration is also given to the particular dynamics of fieldwork in urban settings.

NOTE: Students who have received credit for ANTH 355 may not take this course for credit.

SOCI 358 Social Demography (3 credits) Prerequisite: See N.B. number (1); SOCI 212. This course provides an introduction to the basic principles, issues, data, and methods of

population studies. The emphasis in the course is on social factors that affect demographic processes (fertility, nuptiality, mortality, and migration), and the ways in which demographic change is related to social structure and social change.

SOCI 361 *Criminology* (3 credits)
Prerequisite: See N.B. number (1). The course analyses the emergence of criminology as a discipline, and reviews a range of contemporary theoretical perspectives on crime, criminal behaviour, and crime control.

SOCI 362 *Crime and Justice* (3 credits) Prerequisite: See N.B. number (1). This course provides a critical analysis of the Canadian criminal justice system. The focus is on the process by which the accused is judged guilty or innocent, sentenced, punished or "corrected", and the treatment of the victim.

SOCI 363 Law and Society (3 credits)
Prerequisite: See N.B. numbers (1) and (3).
This course situates the study of law in crosscultural perspective. It involves an examination
of the kinds of institutions found in place of
courts in non-Western societies. This course
also explores numerous issues of relevance to
the legitimacy of contemporary Western legal
systems, such as the relationship between law
and morality, the idea of right prior to good, and
the nature of legal reasoning.

SOCI 366 The History and Sociology of Genocide to 1920 (3 credits)

This course is cross-listed with HIST 359.

Prerequisite: See N.B. numbers (1) and (3).

Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to it up to 1920.

NOTE: Students who have received credit for HIST 359 or 368 or SOCI 368 may not take this course for credit.

SOCI 367 The History and Sociology of Genocide from 1920 to the Present (3 credits)

This course is cross-listed with HIST 360.
Prerequisite: See N.B. numbers (1) and (3).
Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that led to genocide from 1920 to the present.

NOTE: Students who have received credit for HIST 360 or 368 or SOCI 368 may not take this course for credit.

SOCI 375 Social Construction of Sexuality (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides a cross-cultural, interdisciplinary approach to the study of human sexuality. There are three major components. One explores the validity of contemporary sexual beliefs and attitudes. Another focuses on the extent to which sexual beliefs and behaviours

are socially organized. A third provides an introduction to theories which examine how biological and/or social forces shape our sexual lives. NOTE: Students who have received credit for this topic under a SOCI 398 number may not take this course for credit.

SOCI 376 Socialization (6 credits)

Prerequisite: See N.B. number (1). This course examines the social and cultural processes by which the individual becomes a functioning member of society. Attention is given to adult socialization and re-socialization in diverse institutional contexts such as schools, occupations, hospitals, prisons, the military. The relationship of social structure to role acquisition and role performance is a major focus of the course. NOTE: Students who have received credit for SOCI 270 may not take this course for credit.

SOCI 378 The Family (6 credits)

Prerequisite: See N.B. number (1). The family as an institution is examined in relation to social structure and historical change. Special emphasis is placed on trends in the nuclear family patterns of contemporary North American society, and on the relation of the family to the broader societal environment.

NOTE: Students who have received credit for SOCI 272 may not take this course for credit.

SOCI 379 Cross-Cultural Perspectives on Gender (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course explores through different theoretical perspectives and ethnographic examples, cross-cultural differences in sex/gender systems. A comparative analysis of gender relations in band, tribal, and state societies is undertaken. Topics discussed include the sexual division of labour, the cultural and social construction of gender, and the impact of economic development.

SOCI 381 Ethnic Communities in Canada (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course aims at familiarizing students with the social factors and dynamics of contemporary ethno-cultural communities in Canada. Topics may include the immigration process and settlement; community development, structures, and organizations; the ethnic family; socio-economic status and achievement; cultural continuity and change; minority-majority relations and relations with other ethno-cultural communities.

SOCI 383 Identity and Community in Europe (3 credits)

Prerequisite: See N.B. numbers (1) and (3). The course examines the role of history and religion, culture, and ethnicity in the construction of identity and community in twentieth-century Europe. Readings include different theoretical approaches to topics such as rural development, labour migration, and ethno-nationalism as well as ethnographies of communities in one or more regions of Europe.

SOCI 398 Selected Topics in Sociology

(3 credits)

SOCI 399 Selected Topics in Sociology

(6 credits)

Prerequisite: See N.B. number (1). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

SOCI 401 The History of Social Thought (6 credits)

Prerequisite: See N.B. number (2). This course presents an overview of the various ideas and schools of thought which attempt to explain the organization, development, and change of various aspects of human societies. The emphasis is on the philosophical underpinnings of the discipline of sociology. The timespan ranges from ancient Greek social thought to early nineteenth-century European thought in which sociology was founded.

SOCI 404 Sociology of Literature (3 credits)

Prerequisite: See N.B. number (2); or permission of the Undergraduate adviser. This course presents a critical study of literature and para-literature as a cultural and social practice. Various approaches to the sociology of literature are examined. The emphasis is on the social genesis of literature. Selected texts of Canadian fiction

SOCI 406 Sociology of Knowledge (3 credits)

and drama are analysed.

Prerequisite: See N.B. number (2). This course examines a variety of theories of the relation of knowledge and belief to social contexts.

SOCI 408 Contemporary Sociological Theory (6 credits)

Prerequisite: See N.B. number (2); SOCI 300. This course examines major developments in social theory against the background supplied by the classic projects of Marx, Durkheim, Simmel, and Weber. Particular emphasis is placed on contested substantive, methodological, and practical conceptions of social structure, culture, and human agency in contemporary schools of sociology such as functionalism, neomarxism, structuralism, critical theory, hermeneutical theory, social constructionism, rational exchange theories, and post-modernist thought. NOTE: Students who have received credit for SOCI 402 or 403 may not take this course for credit.

SOCI 409 Honours Seminar (6 credits) Prerequisite: See N.B. number (2); SOCI 410; and permission of the Honours adviser. This course involves the student formulating an Honours research proposal, and the research and writing of an Honours paper.

SOCI 410 Research Design and Analysis (6 credits)

Prerequisite: See N.B. number (2); SOCI 212, 213. This course looks at quantitative methods of data collection and analysis. Topics include experimental and quasi-experimental design, principles of measurement, survey design, secondary data sources, techniques of multivariate analysis, and interpretation.

SOCI 432 Theories of Ethnicity (6 credits)

Prerequisite: See N.B. numbers (2) and (3). The course focuses on some of the ways in which anthropology and sociology have conceptualized and problematised notions of culture, cultural boundary, cultural mixing, ethnicity, race, and multi-racialism. This course takes a broad comparative approach and is concerned with exploring what these concepts mean in a variety of contexts.

SOCI 437 Social Movements (3 credits)

Prerequisite: See N.B. number (2). The nature, emergence, and dynamics of organized collective behaviour and social movements are examined in light of classical and contemporary theories. The course focuses on the impact of leadership, organizational resources, and discontent with institutionalized social relations on social movements. Contemporary social movements in Québec, the rest of Canada, and the U.S. serve as illustrations.

NOTE: Students who have received credit for SOCI 337 may not take this course for credit.

SOCI 445 Sociology of Labour Movements (3 credits)

Prerequisite: See N.B. number (2). This course analyses the origins and development of labour movements as well as contemporary characteristics of union organizations within the context of their social, political, and economic environments. Emphasis upon Canada and Québec. NOTE: Students who have received credit for SOCI 345 may not take this course for credit.

SOCI 450 Seminar in Urban and Metropolitan Studies (6 credits)

Prerequisite: See N.B. number (2). This course presents an intensive study of selected theories and monographs dealing with aspects of urbanization.

SOCI 451 Seminar and Practicum in Community and Ethnic Studies (6 credits)

Prerequisite: See N.B. numbers (2) and (3). This seminar centres around student projects which involve research relating to community or ethnic issues. Such research may be of a theoretical or applied nature. In the seminar, students are helped to choose, design, conduct, and present their research. Research topics may be related to agencies, organizations, or practical issues in which the students are already involved.

SOCI 457 Population and Society (3 credits)

Prerequisite: See N.B. number (2). This course involves a critical examination of the relationship between population and society. This course treats both theoretical and applied aspects of this relationship, with particular emphasis on the problem of population and resources and the examination of social and demographic policies in the developed and the developing world. NOTE: Students who have received credit for SOCI 357 may not take this course for credit.

SOCI 472 Youth Culture (3 credits) Prerequisite: See N.B. numbers (2) and (3). This course is concerned with the cultural agency of youth, with particular emphasis on the study of peer groups. The production of culture by youth is examined through a wide range of anthropological and sociological studies.

SOCI 474 (also listed as ANTH 474) Symbols, Rituals, and the Body (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course examines the social roles of the body. Topics include body image and self-esteem, the symbolism of beauty and ugliness, height, hair, dress, the face, body language, health and fitness, eating and drinking patterns. The subject is considered in anthropological and sociological perspectives.

NOTE: Students who have received credit for SOCI 374 or ANTH 474 may not take this course for credit.

SOCI 475 Men and Masculinist Theory (3 credits)

Prerequisite: See N.B. number (2) and (3). This course is a review of the emerging men's movements in North America. It considers the various and changing roles of men and meanings of masculinity, and compares the conceptualizations of men in feminist discourses.

NOTE: Students who have received credit for SOCI/ANTH 498G may not take this course for

SOCI 476 Feminist Sociological Theories (3 credits)

Prerequisite: See N.B. number (2). Analysis of recent debates and perspectives within feminist social theory, in particular the concepts of gender, equality, difference, identity, and power; feminist dialogues with, and critiques of, sociological theory.

SOCI 480 Victorian Sociology (3 credits) Prerequisite: See N.B. number (2). This course provides the opportunity to study the lives and writings of women and men of the nineteenth century who contributed to the understanding of society and to the emergence of British and American sociology. The research and writings studied include those of Martineau, Tocqueville, Mill, Marx, Engels, Tristan, Maine, Spencer, Harrison, Mayhew, Booth, Gilman, Besant, Veblen, and Webb.

SOCI 498 Advanced Topics in Sociology

(3 credits)

SOCI 499 Advanced Topics in Sociology (6 credits)

Prerequisite: See N.B. number (2). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

Programmes

ANTHROPOLOGY

- **BA Honours in Anthropology**
- ANTH 2023 3
- 3 SOCI 212³
- 6 200-level ANTH credits
- 200-level SOCI credits 3
- 3 ANTH 212³
- ANTH 311³, 312³ 6
- 6 ANTH 3156
- 6 300-level ANTH credits
- 3 ANTH 440³
- ANTH 495⁶ 6
- 15 400-level ANTH credits
- 60 **BA Specialization in Anthropology**
- ANTH 2023 3
- SOCI 2123 3
- 200-level ANTH credits
- 3 200-level SOCI credits
- ANTH 212³ 3
- 6 ANTH 311³, 312³
- 6 ANTH 315⁶
- ANTH 440³

- 300- or 400-level ANTH credits (maximum of 12 credits from the 300
- **BA Joint Specialization in** Anthropology and Sociology
- ANTH 2023* 3
- SOCI 2033** 3
- 6
- SOCI 212³, 213³ ANTH 311³, 312³ 6
- SOCI 300⁶ 6
- Chosen from SOCI 310⁶, 315⁶, 410⁶ 6
- Chosen from ANTH/SOCI 3413; ANTH/SOCI 3533, 3553, 3633, 3753, 379³, 381³, 383³, 430³, 451⁶, 472³
- 400-level ANTH credits
- 400-level SOCI credits 6
- 6 ANTH or SOCI credits
- 42 BA Major in Anthropology
- 3 ANTH 2023
- 200-level ANTH credits

- 200-level ANTH or SOCI credits 3
- 3 200-level SOCI credits
- ANTH 311³, 312³
- 9 300-level ANTH credits
- 15 400-level ANTH credits

30 Minor in Anthropology

- 3 ANTH 2023*
- 3 200-level ANTH credits
- 200-level ANTH or SOCI credits

- 6 ANTH 311³, 312³
- 12 300-level ANTH credits
- 400-level ANTH credits

*Students exempted from ANTH 2023 are required to take three credits from ANTH 200and 300-level courses.

**Students exempted from SOCI 2033 are required to take three credits from SOCI 200- or 300-level courses.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are open to students who have successfully completed ANTH 202 or equivalent, plus at least three credits of 200-level Anthropology courses.
- (2) 400-level courses are open to students who have successfully completed ANTH 311 and 312, plus at least six credits of 300-level Anthropology courses or permission of the Anthropology
- (3) Entry requirements for Sociology/Anthropology cross-listed courses depend on the discipline through which the course is entered. Once students have taken a cross-listed course under one disciplinary designation they may not take the course under the corresponding designation in the other discipline for credit.

ANTH 202 Introduction to Culture (3 credits)

An introduction to the anthropological study of culture. The course begins with a consideration of the concepts, models, and methods used by anthropologists. This is followed by an examination of the many ways in which peoples of the world, past and present, have organized the activities, institutions, and belief systems that sustain social life. The course concludes with a discussion of the relevance of cultural anthropology to contemporary issues.

ANTH 203 Culture and Biology: An Anthropological Perspective

(3 credits)

This course focuses on the interrelationship between culture and human biology. The first part of the course examines current debates about human origins, human variation, and the influence of cultural adaptation on human biology. This is followed by a critical examination of the strategies of sociobiology for the study of socio-cultural phenomena.

ANTH 204 Native Peoples of North America (3 credits)

Focusing primarily on the Native peoples of Canada, this course examines the ecological, economic, social, and religious aspects of Native cultures. A representative society from each geographic area of Canada is studied. This course is primarily ethnographic in emphasis, but it also seeks to provide some of the social and historical background necessary to understand the current situation of Native communities.

ANTH 212 Elements of Ethno-Linguistics (3 credits)

This is an introductory course which explores the relationship between language and culture, and

the use of language in society. Major issues and debates in ethno-linguistics, socio-linguistics, and philosophy of language are examined.

ANTH 230 Race and Ethnic Relations (3 credits)

Prerequisite: See N.B. number (3). Race and ethnicity are examined as bases of social differentiation. Ethnic group relations are analysed in relation to stratification and the exercise of power. The course includes explorations of the phenomena of discrimination, prejudice, and intergroup accommodation.

Culture and Commerce ANTH 231 (3 credits)

This course explores the influence of cultural values on the organization of the production, distribution or marketing, and the consumption of goods and services at both the local and global levels of the world economy. It also examines the social and environmental impact of the globalization of the consumer society.

Anthropology and Contemporary Issues (3 credits)

This course examines contemporary world issues from a cross-cultural perspective. Discussion ranges from a critical examination of anthropological concepts and methods to a consideration of some of the practical or applied uses of anthropology. Specific topics include the consequences of underdevelopment, modernization, and the place of folk cultures and tradition in an increasingly global society. NOTE: Students who have received credit for ANTH 370 may not take this course for credit.

ANTH 272 Comparative Culture (3 credits) This course is a general introduction to social and cultural anthropology. It examines the ways in which anthropologists use the comparative method to understand cultures in their unity and diversity. The focus is upon reading ethnographies.

ANTH 276 Gender and Society (6 credits) Prerequisite: See N.B. number (3). This course explores the social construction of gender categories both historically and in the present. The focus is upon examining the various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities. NOTE: Students who have received credit for SOCI 372 may not take this course for credit.

ANTH 298 Selected Topics in Anthropology (3 credits)

ANTH 299 Selected Topics in Anthropology (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

ANTH 302 Art, Aesthetics, and Anthropology (3 credits)

Prerequisite: See N.B. number (1). This course examines the relationship between art and society. It is mainly concerned with analysing how art may function as a means of signifying and perpetuating a given social order. Examples of artistic practice are drawn from diverse North and South American, African, and Melanesian cultures.

ANTH 303 Aboriginal Indian and Inuit Socio-Political Organizations (3 credits)

Prerequisite: See N.B. number (1). This course examines the various forms of socio-political organization worked out by the Indian and Inuit peoples of North America prior to contact and colonization. This knowledge is then applied to understanding current conflicts between First Nations and the Canadian and American governments.

ANTH 305 Culture and History (3 credits) Prerequisite: See N.B. number (1). This course analyses some of the ways "history" has been understood both in our own and other cultures, including history as legitimating charter, as repeating cycle, as a scientific inquiry, as a series of unique events, and as a basis for ethical judgements.

ANTH 307 Understanding Myths (3 credits)

Prerequisite: See N.B. number (1). This course presents a survey of current anthropological theories of the nature and function of myths. The course also analyses competing interpretations of some classic Western myths, and concludes with an examination of mythmaking in contemporary Western culture.

ANTH 311 The Making and Unmaking of Anthropological Theories I (3 credits)

Prerequisite: See N.B. number (1). This course provides the student with a critical perspective on the historical development of theory in anthropology. Students are introduced to evolutionism, functionalism, structuralism, marxism, and postmodernism by rereading original texts and classical and contemporary ethnography. The role that fieldwork plays in "unmaking" theory in anthropology is explored. Emphasis is placed on the history and critique of British and European anthropological traditions. NOTE: Students who have received credit for

ANTH 310 may not take this course for credit.

ANTH 312 The Making and Unmaking of Anthropological Theories II (3 credits)

Prerequisite: See N.B. number (1). This course provides the student with a critical perspective on the historical development of theory in anthropology. Students are introduced to evolutionism, functionalism, structuralism, marxism, and postmodernism by rereading original texts and classical and contemporary ethnography. The role that fieldwork plays in "unmaking" theory in anthropology is explored. Emphasis is placed on the history and critique of American anthropological traditions. NOTE: Students who have received credit for ANTH 310 may not take this course for credit.

Field Research (6 credits) **ANTH 315**

Prerequisite: See N.B. numbers (1) and (3). This course provides the opportunity to study and practise qualitative research methods as they are used by sociologists and anthropologists. Students learn systematic procedures for the collection of primary data using methods that include participant-observation and formal and informal interviewing.

NOTE: Students who have received credit for SOCI 313 or 314 may not take this course for credit.

ANTH 323 Peoples and Cultures of the Middle East (3 credits)

Prerequisite: See N.B. number (1). This course explores the diversity of religious practices, social values, economic organization, and family and gender relations in several different Middle Eastern societies by examining ethnographic material on transformations and continuities in the lives of urban and rural people.

ANTH 324 Peoples and Cultures of Oceania (3 credits)

Prerequisite: See N.B. number (1). This course presents an overview of the peoples and cultures of Oceania, with particular emphasis on Melanesia. In addition to studying the peopling of the Pacific, the course delves into a range of classic anthropological topics, and addresses

contemporary issues of gender, migration, and urbanization.

NOTE: Students who have received credit for this topic under an ANTH 398 number may not take this course for credit.

ANTH 325 Magic, Science, Religion, and Ideology (3 credits)

Prerequisite: See N.B. number (1). This course analyses belief systems and their attendant rituals and practices. The focus is on how anthropologists differentiate between magic, science, religion, and ideology, and how anthropologists understand the relationship between belief systems and reality.

ANTH 326 Peoples and Cultures of Sub-Saharan Africa (3 credits)

Prerequisite: See N.B. number (1). The course gives a broad historical and geographical survey of the region, and discusses, through case studies, older and contemporary topics, debates, and issues of African anthropology.

ANTH 332 Health, Illness and Healing in Cross-Cultural Perspective

(3 credits)

Prerequisite: See N.B. number (1). This course involves the exploration of a series of alternatives to Western ways of defining health and treating sickness, with particular emphasis on shamanistic and East Asian medicine. The major part of the course is devoted to the study of ethnomedicine, and exploring some of the central questions of transcultural psychiatry. The course concludes with a discussion of the role of the anthropologist in international healthplanning.

NOTE: Students who have received credit for this topic under an ANTH 398 number may not take this course for credit.

ANTH 341 Migration and Labour Markets (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course investigates labour markets in both Canadian and international contexts with particular emphasis on the integration of migrants, ethnic groups, and visible minorities. An important focus of the course is on the way these groups have acted as agents of change in restructuring labour markets.

ANTH 353 Community Studies (3 credits) Prerequisite: See N.B. numbers (1) and (3). This course involves the study of communities as locales and as symbolic constructions. The major theoretical approaches used in community studies are evaluated in relation to research and applied interests. Special attention is given to sensitizing students to issues concerning gender, race, ethnicity, and class at the local level.

ANTH 355 Urban Regions (3 credits) Prerequisite: See N.B. numbers (1) and (3). This course reviews the work of anthropologists and sociologists in cities. The focus is on the

social organization of social life in First and Third World urban spaces. Consideration is also given to the particular dynamics of fieldwork in urban settings.

NOTE: Students who have received credit for SOCI 355 may not take this course for credit.

Kinship (3 credits) **ANTH 361**

Prerequisite: See N.B. number (1). This course addresses both classical and contemporary issues in kinship studies, with particular emphasis on the following areas: filiation, adoption, descent, genealogies; rules of residency, private and public spheres; incest, sex, and marriage; terminologies and attitudes.

ANTH 363 Law and Society (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course situates the study of law in crosscultural perspective. It involves an examination of the kinds of institutions found in place of courts in non-Western societies. The course also explores numerous issues of relevance to the legitimacy of contemporary Western legal systems, such as the relationship between law and morality, the idea of right prior to good, and the nature of legal reasoning.

ANTH 371 Peasant Societies and Cultures (3 credits)

Prerequisite: See N.B. number (1). This course examines agrarian societies in different cultural and political contexts. The course begins with a brief discussion of the archaeological evidence for early and later Neolithic agriculturalists. This is followed by an examination of peasantries, their persistence and transformation. The course concludes with a discussion of the role that subsistence producers play in contemporary societies.

ANTH 375 Social Construction of Sexuality (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides a cross-cultural, interdisciplinary approach to the study of human sexuality. There are three major components. One explores the validity of contemporary sexual beliefs and attitudes. Another focuses on the extent to which sexual beliefs and behaviours are socially organized. A third provides an introduction to theories which examine how biological and/or social forces shape our sexual lives.

ANTH 379 Cross-Cultural Perspectives on Gender (3 credits)

Prerequisite: See N.B. numbers (1) and (3). The course explores through different theoretical perspectives and ethnographic examples, crosscultural differences in sex/gender systems. A comparative analysis of gender relations in band, tribal, and state societies is undertaken. Topics discussed include the sexual division of labour, the cultural and social construction of gender, and the impact of economic development. NOTE: Students who have received credit for ANTH 308 may not take this course for credit.

ANTH 381 Ethnic Communities in Canada (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course aims at familiarizing students with the social factors and dynamics of contemporary ethno-cultural communities in Canada. Topics may include the immigration process and settlement; community development, structures, and organizations; the ethnic family; socio-economic status and achievement; cultural continuity and change; minority-majority relations and relations with other ethno-cultural communities.

ANTH 383 Identity and Community in Europe (3 credits)

Prerequisite: See N.B. numbers (1) and (3). The course examines the role of history and religion, culture, and ethnicity in the construction of identity and community in twentieth-century Europe. Readings include different theoretical approaches to topics such as rural development, labour migration, and ethno-nationalism as well as ethnographies of communities in one or more regions of Europe.

ANTH 398 Selected Topics in Anthropology (3 credits)

ANTH 399 Selected Topics in Anthropology (6 credits)

Prerequisite: See N.B. number (1). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

ANTH 411 Critical Anthropology (3 credits)

Prerequisite: See N.B. number (2). This course examines the so-called crises into which anthropology has been plunged as a consequence of decolonization and other social movements, as well as the strategies of critique which anthropologists have developed in response.

ANTH 420 Psychological Anthropology (3 credits)

Prerequisite: See N.B. number (2). This course examines and critiques the theoretical concepts of Western academic and folk psychology from the perspective of the psychologies of other cultures. Topics considered include the cultural construction of the emotions, personality development, perception, culture-bound psychiatric syndromes (such as windigo psychosis, amok), and altered states of consciousness, and indigenous theories of dream interpretation.

ANTH 421 Symbolic Anthropology (3 credits)

Prerequisite: See N.B. number (2). This course examines alternative theoretical approaches to the study of the role of symbols in society. The course is devoted to a consideration of the contributions of structural, psychoanalytic, and

interpretive anthropology.

NOTE: Students who have received credit for ANTH 426 may not take this course for credit.

ANTH 422 Post-Modern Anthropology (3 credits)

Prerequisite: See N.B. number (2). A further examination of alternative theoretical approaches to the understanding of the symbolic. The course focuses on the contributions of literary theory, the philosophy of pragmatism, and post-structuralist and anti-psychoanalytic thought, to current debate in anthropology. NOTE: Students who have received credit for ANTH 426 may not take this course for credit.

ANTH 423 Political Anthropology (3 credits)

Prerequisite: See N.B. number (2). This course examines the political process and political organization in cross-cultural perspective. The focus is on how order is achieved in the absence of the state, as well as questions of leadership, power, and authority in different social contexts.

NOTE: Students who have received credit for ANTH 459 may not take this course for credit.

ANTH 430 Anthropology of Development (3 credits)

Prerequisite: See N.B. number (2). This course considers the systematic reduction of poverty and powerlessness at individual and societal levels. Several development problems are examined, including national debt crisis, population growth, urbanization, and various degrees of state withdrawal from regulating the market. Special emphasis is given to case studies from major regions of the Third World on the varied impact of development on gender relations and on the eradication of social and economic inequalities.

ANTH 431 Neo-Marxism and Cultures (3 credits)

Prerequisite: See N.B. number (2). This course analyses the relationships between economy and cultural systems. The first section is devoted to the concept of economic base and superstructure in the industrial world; the second section focuses on selected case studies of non-industrial cultures and industrial cultures. The course concludes with an appraisal of the quality of economic life in non-industrial cultures.

NOTE: Students who have received credit for ANTH 401 or 402 may not take this course for credit.

ANTH 432 Theories of Ethnicity (6 credits) Prerequisite: See N.B. numbers (2) and (3). The course considers some of the ways in which anthropology and sociology have conceptualized and problematised notions of ethnicity, race, multi-racialism, culture, cultural boundary, and cultural mixing. The course takes a broad comparative approach.

ANTH 440 Culture, Language, and Mind (3 credits)

Prerequisite: See N.B. number (2); ANTH 212. This course looks at the relationship between linguistics and anthropology, and examines some of the issues in the linkage between language, culture, and thought.

NOTE: Students who have received credit for ANTH 306 may not take this course for credit.

ANTH 451 Seminar and Practicum in Community and Ethnic Studies (6 credits)

Prerequisite: See N.B. numbers (2) and (3). This seminar centres around student projects which involve research relating to community or ethnic issues. Such research may be of a theoretical or applied nature. In the seminar, students are helped to choose, design, conduct, and present their research. Research topics may be related to agencies, organizations, or practical issues in which the students are already involved.

ANTH 463 Current Debates in Kinship (3 credits)

Prerequisite: See N.B. number (2). This course addresses current issues in the field of kinship, such as the new reproductive technologies, international adoption, incest of the first and second degree, kinship and body fluids, and the deinstitutionalization of family ties. NOTE: Students who have received credit for

ANTH 461 or 462 may not take this course for

credit.

ANTH 465 Legal Anthropology (3 credits) Prerequisite: See N.B. number (2). This course analyses the legal system as an institutionalized system of social control and meanings, using historical and comparative data. Special attention is given to the study of the interface of law and other areas of sociological inquiry, including social change, conflict, and decision-making.

ANTH 471 Anthropology of Food (3 credits)

Prerequisite: See N.B. number (2). This course approaches food through four main themes: archaeology of food production (domestication of plants and animals); class, cuisine, and the development of taste; cosmic and other symbolism of food; and the political economy of food and hunger.

NOTE: Students who have received credit for ANTH 340 may not take this course for credit.

Youth Culture (3 credits) Prerequisite: See N.B. numbers (2) and (3). This course is concerned with the cultural agency of youth, with particular emphasis on the study of peer groups. The production of culture by youth is examined through a wide range of anthropological and sociological studies.

ANTH 474 (also listed as SOCI 474) Symbols, Rituals, and the Body (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course examines the social roles of the body. Topics include body image and self-esteem, the symbolism of beauty and ugliness, height, hair, dress, the face, body language, health and fitness, eating and drinking patterns. The subject is considered in anthropological and sociological perspectives. NOTE: Students who have received credit for SOCI 374 or 474 may not take this course for credit.

ANTH 475 Men and Masculinist Theory (3 credits)

Prerequisite: See N.B. number (2) and (3). This course is a review of the emerging men's movements in North America. It considers the various and changing roles of men and meanings of masculinity, and compares the conceptualizations of men in feminist discourses. NOTE: Students who have received credit for ANTH/SOCI 498G may not take this course for credit.

ANTH 479 Feminism and Anthropology (3 credits)

Prerequisite: See N.B. number (2). This course explores the dialogue between feminist theory and anthropology. Topics discussed include "feminist standpoint" theory and the critique of "objectivity" in feminist philosophy of science; feminist contributions to the historical development of anthropological theory; and the relationship between feminism and postmodernism in current debates on ethnography and fieldwork.

ANTH 495 Honours Essay (6 credits) Prerequisite: See N.B. number (2); ANTH 311, 312; and permission of the Honours adviser. Under the supervision of an Anthropology staff member, the student prepares an Honours essay on a subject chosen in consultation with and approved by the professor.

ANTH 498 Advanced Topics in Anthropology (3 credits)

ANTH 499 Advanced Topics in Anthropology (6 credits)

Prerequisite: See N.B. number (2). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

31.320 TEACHING OF ENGLISH AS A SECOND LANGUAGE

Faculty

Director
PALMER ACHESON, Associate Professor

Professors
PATSY M. LIGHTBOWN
RONALD MACKAY

Associate Professors ELIZABETH GATBONTON V. ALEX SHARMA JOANNA L. WHITE Assistant Professor LORI MORRIS

Lecturer
MARLISE HORST

Location

Sir George Williams Campus Annex EN, Room: 209 (514) 848-2450

Objectives

The work of the TESL Centre is to prepare teachers and other professionals to develop, staff, manage, and evaluate English as a Second Language (ESL) programmes.

Through the Centre, students earn either an undergraduate degree or a Certificate in the teaching of ESL, with special attention to the needs of the Québec education system. A graduate programme in Applied Linguistics is offered for experienced language educators.

The Centre also provides a university-wide testing service for incoming students whose first language is not English, as well as comprehensive instruction for those seeking to improve their mastery of English for academic purposes.

BEd (Teaching English as a Second Language)

The Centre for the Teaching of English as a Second Language offers the BEd Degree (Teaching English as a Second Language).

Admission Requirements (BEd)

General admission requirements are listed in §13 (Admission Regulations). Specific requirements are as follows:

- Satisfactory completion of a two-year pre-university programme in a cégep or equivalent. Within
 the programme, the students will be required to have successfully completed the equivalent of
 four semester courses in English.
- Owing to the specialized nature of this programme, no more than 60 pro-tanto credits will be permitted, and the University reserves the right to determine which ones these should be. (See §16.1.3.5)
- Applicants must demonstrate competence in English and French through formal tests of
 proficiency and obtain scores acceptable to the TESL Centre.

 NOTE I: Arrangements for taking the proficiency tests may be made through the Office of the
 Registrar.
- The BEd (TESL) is open to both prospective and experienced teachers and is offered in the day and evening. The internship courses are offered only as daytime, Fall/Winter courses.

Programme

- 120 *BEd Specialization in Teaching English as a Second Language
- TESL 221³, 224³, 231³, 326³, 327³, 330³, 331³, 341³, 351³, 355³, 415³, 426³, 427³, 466³, 467³, 486⁶, 487⁶, 488³, and six credits chosen from TESL, LING.
- 6 After testing, chosen from advanced ESL; intermediate/advanced FRAN; other languages (GERM, ITAL, PORT, RUSS, SPAN, etc.) at any level.
- 18 EDUC 210⁶, 445³, 450³, and six credits chosen from EDUC, ADED, PSYC.

- 6 ENGL 212³ and 213³ or 396⁶
- 6 Canadian English literature (three credits), Canadian English or other English literature (three credits)
- 18 General university elective credits from any faculty.

*The Department regrets that it is unable to accommodate applications for admission to the BEd programme in Teaching English as a Second Language for the 2000-01 academic year.

CERTIFICATE IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE: SEQUENCE I

This 30-credit programme is offered to experienced teachers who are not native speakers of English.

Admission Requirements

- Candidates must have an appropriate teacher's certificate or the equivalent of one year's experience as a full-time second-language teacher (400 hours).
- Candidates must take a formal test of English proficiency and obtain a score acceptable to the TESL Centre.

NOTE: Arrangements for taking the proficiency test may be made through the Office of the Registrar.

Concordia students may transfer into the Certificate programme all applicable Concordia credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. Students from other institutions may transfer up to 12 applicable credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

The TESL Certificate: Sequence I programme is offered in the evening and in the Summer Session, and may be offered outside Montréal through the Office for Off-Campus Education.

NOTE II: Individuals who have completed TESL Certificate: Sequence II are not eligible for admission to TESL Certificate: Sequence I.

Programme

*Certificate in the Teaching of English as a Second Language: Sequence I Courses

TESL 201³, 203⁶, 205³, 324³, 341³, 413³, 415³, 424³, 433³ *Admission suspended for 2000-01.

CERTIFICATE IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE: SEQUENCE II

This 30-credit programme is offered to experienced teachers whose native language is English or whose proficiency in English meets native-user standards.

Admission Requirements

- Applicants normally have an appropriate teacher's certificate or the equivalent of one year's experience as a full-time second-language teacher (400 hours).
- Applicants must demonstrate competence in English and French through formal tests of proficiency and obtain scores acceptable to the TESL Centre.

NOTE I: Arrangements for taking the proficiency tests may be made through the Office of the Registrar. Concordia students may transfer into the Certificate programme all applicable Concordia credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. Students from other institutions may transfer up to 12 applicable credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

The TESL Certificate: Sequence II programme is offered in the day and evening.

NOTE II: Individuals who have completed a prior Concordia University TESL Certificate are not eligible for admission to this Certificate.

Programme

- 30 Certificate in the Teaching of English as a Second Language: Sequence II
- 6 ENGL 212³ and 213³ or 396⁶
- 24 TESL 221³, 231³, 324³, 331³, 341³, 415³, 424³, 433³

INFORMATION RELEVANT TO PROGRAMMES IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE

NOTE I: Upon successful completion of the BEd (TESL) programme and after application to the Office of the Registrar, a graduate may be recommended to the Québec Teachers Certification Service for a "Brevet d'enseignement: autorisation personnelle permanente" (a teaching diploma). This teaching diploma will be issued to teach in anglophone schools. Graduates who wish to teach ESL in francophone schools, the only schools in Québec where ESL may be taught, must pass the Ministry of Education's French test of listening, speaking, reading and writing skills.

There is no comparable certification process for teaching ESL at the cégep level — Collège d'enseignement général et professionnel (junior college) or other adult level.

To be recommended for certification, students must achieve at least a "C" grade in methodology and teaching practice courses: that is, TESL 224³, 324³, 326³, 327³, 330³, 424³, 426³, 427³, 433³, 466³, 467³, 486⁶, and 487⁶.

Students who obtain a passing grade that is below the level required for recommendation for certification will be placed on conditional standing within the programme and will be so informed in writing by the director of the TESL Centre. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see Calendar §16.3.12.)

Students who obtain a failing grade (F, R, or NR) in any of the courses listed above as methodology and practice teaching will be required to withdraw from the programme and will also be so informed in writing by the director of the TESL Centre.

To be recommended for certification in Québec, students must demonstrate a very good working knowledge of French.

In the event that a student meets regular university standards but does not satisfy the requirements for recommendation for certification, the student may apply to receive the university degree but will not be recommended to the Ministry.

NOTE II: Upon admission, students may be granted exemptions from courses in TESL programmes if they have completed equivalent work at the university level.

Replacement for these exemptions must be made in accordance with the guidelines established by the TESL Centre and approved by the University. Copies of these guidelines may be obtained in the TESL Centre.

TESL Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Speech (3 credits)

This course is open only to non-native speakers of English. The aim of the course is to prepare ESL teachers who are not native speakers of English to analyse pronunciation difficulties in terms of the major phonetic and phonemic features of English. Emphasis is placed on appropriate instruction for improving pronunciation. NOTE: The only TESL programmes towards which the course may be credited are the BEd (TESL) and TESL Certificate (Sequence I). Students who have received credit for TESL 221 may not take this course for credit.

TESL 203 Effective Communication (6 credits)

This course is open only to students who are non-native speakers of English. The aim of the course is to raise the level of oral and written communication of ESL teachers who are nonnative speakers of English.

NOTE: The only TESL programme towards which the course may be credited is the TESL Certificate (Sequence I).

TESL 205 Introduction to the Structure of English (3 credits)

This course is open only to students who are non-native speakers of English. The structure of English is examined together with ways of using this knowledge for the effective teaching of English as a second language.

NOTE: The only TESL programmes towards which the course may be credited are the BEd (TESL) and TESL Certificate (Sequence I).

Students who have received credit for TESL 231 may not take this course for credit.

TESL 221 Phonology for Teachers (3 credits)

Prerequisite: TESL 224, 231 concurrently. The aim of this course is to provide students with a knowledge of the major features of the English sound system, and to prepare them to apply this knowledge in the language classroom. Contrasts and comparisons are made with French and other languages.

TESL 224 Introduction to Teaching and Classroom Observation (3 credits)

Prerequisite: TESL 221, 231 concurrently. The purpose of this course is to introduce students to the profession of teaching and to give them the opportunity to observe in Québec schools. Students focus on different aspects of pedagogy and administration during their 70 hours in the schools. Data gathered there are analysed in the on-campus portion of the course.

TESL 231 Modern English Grammar (3 credits)

Prerequisite: TESL 221, 224 concurrently. The purpose of this course is to provide students with a current description of the English grammatical system at the text level, to make them aware of grammatical differences between English and French and other major languages, and to alert them to typical grammatical errors made by non-native speakers of English.

TESL 298 Selected Topics in TESL

(3 credits)

TESL 299 Selected Topics in TESL

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Theories of Reading and **TESL 318** Writing (3 credits)

Prerequisite: Nine TESL credits including TESL 324. The course examines the theoretical and research basis for current practice in the teaching of reading and writing. Students become familiar with the concerns and practices of those investigating the development of reading and writing in second-language learners in particular, and become aware of how this is related to teaching materials and activities.

TESL 324 Methodology I (3 credits) Prerequisite: TESL 221; TESL 231 or TESL 201; TESL 205, each with a grade of "C" or better, and admission to a TESL programme or permission of the Department. This course reviews current theory in applied linguistics which relates directly to teaching and learning ESL in the classroom. Techniques and methods appropriate to child, adolescent, and adult learners are discussed and demonstrated. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of listening and speaking. NOTE: Students must have achieved at least a "C" in this course in order to be recommended for teacher certification upon completion of the programme.

TESL 326 Pedagogy: General (3 credits) Prerequisite: TESL 224; TESL 327 concurrently; TESL 331, 341, EDUC 210, previously or concurrently. The purpose of this course is to give a history of TESL methods and to describe various teaching situations. Students examine current principles of TESL pedagogy. The course covers lesson planning, audio-visual aids, classroom organization, management techniques, and adapting published ESL materials to meet MEQ objectives.

Microteaching (3 credits) **TESL 327** Prerequisite: TESL 326 concurrently; TESL 331, 341, EDUC 210, previously or concurrently. The purpose of this course is to put into practice the pedagogical principles learned in TESL 326. Students team teach volunteer adult ESL learners from a local community centre under supervision for a minimum of 48 hours. Students learn how to receive and give feedback, and to engage in reflective dialogue about teaching.

TESL 330 Computers in Language **Learning** (3 credits)

Prerequisite: TESL 355, 426, 466 concurrently. The purpose of this course is to introduce

students to the uses of the computer in the ESL class. Students acquire knowledge of computer applications for language learning and how to incorporate this knowledge into classroom practice.

TESL 331 Grammar for Teachers (3 credits)

Prerequisite: TESL 231. The purpose of this course is to provide students with current approaches, methods, and materials in the teaching of grammar at all levels of the ESL classroom. Students will be prepared to analyse critically and modify published classroom materials related to the teaching and learning of grammar.

TESL 341 Language Acquisition (3 credits)

Prerequisite: TESL 221, 231 previously or concurrently; or permission of the Department. This course examines sociocultural and psycholinguistic influences on the acquisition of a first and second language. These issues are examined in relation to the learning and teaching of a second language.

History of the English **TESL 351** Language (3 credits)

Prerequisite: TESL 221, 231 or permission of the Department; TESL 415, 427, 467 concurrently. The purpose of this course is to provide students with an overview of the significant changes which have taken place in the English language from Proto-Indo-European to the present. Students consider the evolving nature of English and its role as an international language.

TESL 355 Multicultural and Multilevel Classes (3 credits)

Prerequisite: TESL 326 previously or concurrently. The purpose of this course is to prepare student teachers to provide sensitive and effective instruction to learners with different abilities and cultural backgrounds. Students assess the make-up of heterogeneous classes and select and identify appropriate teaching materials and strategies.

Teaching English for Specific **TESL 361 Purposes** (3 credits)

Prerequisite: TESL 324, or permission of the Department. This course provides instruction in the teaching of language skills to those who require English either as an auxiliary to their scientific, technical, or professional skills or as a medium for training in these areas.

TESL 385 Internship I (3 credits)

Prerequisite: TESL 324 and TESL 413 previously or concurrently. This course is offered as part of a cluster of daytime Fall-term courses which introduces the student teacher to the ESL classroom. Students observe experienced teachers, and have opportunities for micro-teaching, as well as some teaching to ESL students. Opportunities are provided for observation and practice with ESL

learners at different ages and levels of proficiency in English.

NOTE: Students who have received credit for TESL 433 may not take this course for credit. NOTE: Students must have achieved at least a "C" grade in this course in order to be recommended for teacher certification upon completion of the programme.

NOTE: Students will complete the in-school portion of this course in a (M.E.Q.-approved) private or public Primary or Secondary school (where French is the language of instruction), in order to be recommended for teacher certification at these levels. Teaching practice completed with adults will not qualify students to be recommended for teacher certification.

TESL 398 Selected Topics in TESL (3 credits)

TESL 399 Selected Topics in TESL (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

TESL 413 Audio-Visual Aids (3 credits)
Prerequisite: TESL 324 previously or concurrently.
This course examines audio-visual resources and their effective use in second-language teaching.
Students are given experience with the technical equipment generally available for use in second-language classrooms. In addition, students produce their own audio-visual materials.

TESL 415 Testing, Evaluation and Course Design (3 credits)

Prerequisite: TESL 351, 427, 467 concurrently. The purpose of this course is to prepare students to test and evaluate learners in different types of ESL programmes. Students examine syllabi and evaluation systems used in the schools and become familiar with placement and proficiency testing materials.

TESL 424 *Methodology II* (3 credits)
Prerequisite: TESL 324. This course continues the presentation of techniques and methods begun in TESL 324. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of reading and writing. *NOTE: Students must have achieved at least a "C" in this course in order to be recommended for teacher certification upon completion of the programme.*

TESL 426 Pedagogy: Primary (3 credits)
Prerequisite: TESL 326; TESL 330, 355, 466
concurrently. The purpose of this course is to
familiarize students with the principles of TESL
pedagogy in regular and intensive ESL primary
classrooms. This course emphasizes knowledge
of MEQ primary-school programmes and
approved materials. Students learn classroom

management techniques, assessment practices, and how to adapt materials to specific primary-school contexts.

TESL 427 Pedagogy: Secondary (3 credits)

Prerequisite: TESL 426; TESL 351, 415, 467 concurrently. The purpose of this course is to familiarize students with the principles of TESL pedagogy in regular and Language Arts (ESL-LA) ESL secondary classrooms. This course emphasizes knowledge of MEQ secondary programmes and approved materials. Students learn classroom management techniques, assessment practices, and how to adapt materials to specific secondary-school contexts.

TESL 433 Practicum (3 credits)

Prerequisite: TESL 324. This course is open only to students enrolled in the TESL Certificate Sequence I or II. In this course, students practise techniques which were introduced in their methodology courses. There are opportunities for observation of ESL classes taught by experienced teachers. Techniques presented in TESL 324 and 424 are practised in micro-teaching, peer teaching, and sessions with groups of ESL students. Requirements include lesson planning and the evaluation of one's own teaching performance.

NOTE: Students must have achieved at least a "C" grade in this course in order to be recommended for teacher certification upon completion of the programme.

NOTE: Students who have received credit for TESL 385 may not take this course for credit.

TESL 434 Error Analysis (3 credits)
Prerequisite: Fifteen TESL credits including
TESL 324 and TESL 341. In this course,
current theories of second-language acquisition
are reviewed and applied. Each student carries
out analyses of ESL learners' language,
focusing on patterns of errors. The identification
and classification of errors is followed by the
development of teaching materials which the
student uses in order to help learners overcome
some persistent errors.

TESL 466 Internship: Primary I (3 credits)
Prerequisite: TESL 327; TESL 330, 355, 426
concurrently. The purpose of this course is to
apply the principles acquired in TESL 426 to the
teaching of ESL to primary-school learners.
Students attend on-campus seminars and
spend a minimum of 140 hours observing and
teaching in a primary school supervised by a
cooperating teacher and a university professor.

TESL 467 Internship: Secondary I (3 credits)

Prerequisite: TESL 466; TESL 427 concurrently; EDUC 450 previously or concurrently. The purpose of this course is to apply the principles acquired in TESL 427 to the teaching of ESL to secondary-school learners. Students attend

on-campus seminars and spend a minimum of 140 hours observing and teaching in a secondary school supervised by a cooperating teacher and a university professor.

TESL 485 Internship II (6 credits) Prerequisite: TESL 385, or equivalent. This course provides supervised teaching in ESL classes, in addition to seminars and discussions on teaching techniques appropriate to different ages and levels of proficiency in English. Students take a daytime Winter-term section, together with a daytime section of TESL 424. Evening sections of these courses are open to experienced teachers who are currently teaching ESL.

NOTE: Students must have achieved at least a "C" grade in this course in order to be recommended for teacher certification upon completion of the programme.

NOTE: Students will complete the in-school portion of this course in a (M.E.Q.-approved) private or public Primary or Secondary school (where French is the language of instruction), in order to be recommended for Québec provincial teacher certification at these levels. Teaching practice completed with adults will not qualify students to be recommended for teacher certification.

NOTE: Students who completed TESL 385 in a Primary school will change to a Secondary school in this course. Those who taught in a Secondary school will change to a Primary school.

TESL 486 Internship: Primary II (6 credits) Prerequisite: TESL 466; TESL 487, 488 concurrently. The purpose of this course is to further develop the skills required in teaching ESL to primary-school learners. Students teach a minimum of 210 hours supervised by a cooperating teacher and a university professor. In addition, students attend on-campus seminars in which they discuss and reflect upon their experiences in the schools.

TESL 487 Internship: Secondary II (6 credits)

Prerequisite: TESL 467; TESL 486, 488 concur-

rently. The purpose of this course is to further develop the skills required in teaching ESL to secondary-school learners. Students teach a minimum of 210 hours supervised by a cooperating teacher and a university professor. In addition, students attend on-campus seminars in which they discuss and reflect upon their experiences in the schools.

TESL 488 Internship Seminar (3 credits) Prerequisite: TESL 486, 487 concurrently. The purpose of this course is to integrate the knowledge gained during the BEd with the knowledge that students have acquired during practice in the field. Students reflect on and make explicit their own professional and personal development over the course of the four-year programme and set goals for future long-term professional development.

TESL 491 Study in a Special Subject (3 credits)

Prerequisite: Permission of the Department. This course provides an opportunity for advanced students to intensify their study beyond the area of specialization already represented by the curriculum. The selected subject varies with the special interest of the instructor conducting the course in any given year.

TESL 492 Study in a Special Subject (3 credits)

Prerequisite: Permission of the Department. A student repeating TESL 491 registers for credits under TESL 492.

TESL 498 Advanced Topics in TESL (3 credits)

TESL 499 Advanced Topics in TESL (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ESL Courses

COURSES IN ENGLISH AS A SECOND LANGUAGE

Courses in English as a Second Language are designed for students who are not native speakers of English and who need further training in the effective use of English in the university setting. Students must be tested for placement in ESL 207, 208, 209, or 210. Information about placement testing schedules may be obtained from the English Language Proficiency Testing Office, TESL Centre, 2070 Mackay, Room: 200, (514) 848-2453. A special examination fee is charged. (See §15.1)

Written work is required in English for these courses; please consult with the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

NOTE: Students enrolled in a regular degree or an extended credit degree programme in the Faculty of Arts and Science may take ESL courses for degree credit, up to a maximum of six credits.

ESL 207 English Language — Intermediate I (3 credits)

Prerequisite: Placement by the Concordia English Language Diagnostic Test. A course for students who are not native speakers of English and who need further training in the effective use of English in the university setting. Emphasis is on reading and writing skills.

NOTE: Students who have completed ESL 100 or have received credit for ENGL 205 or 206 may not take this course for credit.

ESL 208 English Language — Intermediate II (3 credits)

Prerequisite: ESL 207, or placement by the Concordia English Language Diagnostic Test. This course is a continuation of ESL 207. NOTE: Students who have completed ESL 100 or have received credit for ENGL 205 or 206 may not take this course for credit.

ESL 209 English Language — Advanced I (3 credits)

Prerequisite: ESL 208, or placement by the Concordia English Language Diagnostic Test. This course is for students who are not native speakers of English. It encourages the development of effective written communication and improved reading comprehension, so that students may perform competently in their other university work.

NOTE: Students who have received credit for ESL 201 or ENGL 205 or 206 may not take this course for credit.

ESL 210 English Language — Advanced II (3 credits)

Prerequisite: ESL 209, or placement by the Concordia English Language Diagnostic Test. This course is a continuation of ESL 209. Emphasis is upon writing the academic research paper.

NOTE: Students who have received credit for ESL 201 or ENGL 205 or 206 may not take this course for credit.

ESL 290 Communication through the Study of Special Topics (3 credits)

Prerequisite: Successful completion of ESL 201; ESL 209, or tested equivalence. This course is for non-native speakers of English only. Its primary aim is to increase students' oral fluency in English; its secondary aim is to encourage improved levels of competence in the other language skills: listening, reading, and writing.

ESL 298 Selected Topics in ESL (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.330

THEOLOGICAL STUDIES

Faculty

Chair and Graduate Programme Director PAMELA BRIGHT, Associate Professor

Associate Professor CHRISTOPHE POTWOROWSKI

Limited Time Appointments

- Ethics
- Pastoral Ministry

Adjunct Professors
MARIE-FRANCE DION
DAVID ELEY
CHARLES KANNENGIESSER
SEAN E. McEVENUE

Location

Loyola Campus

Hingston Hall B, Room: HB 306

(514) 848-2475

Department Objectives Theology builds a bridge between religious experience and human society. To expand understanding of the human person and of God, the Department seeks to make accessible to all its students an immense tradition of knowledge-especially through interpretation theory, historical analysis, psychological insight, and theoretical elaboration.

Within the spectrum of world religions, it focuses on the Christian experience, and the Roman Catholic tradition in particular. The Department is dedicated to training professional theologians and researchers while expanding the horizons of those who wish to appreciate their heritage.

Programmes

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students must have their programmes approved by the Department.

Students will be admitted to the Certificate in Pastoral Caregiving with the permission of the Department. Admission will be based on number of available places and upon evaluation of a candidate's letter of intent and an interview dealing with their educational background and community experience. All courses in the Department are open to any qualified student of Concordia.

36 BA Major in Theological Studies

- 12 THEO 201³, 202³, 203³, 204³
- 3 Chosen from THEO 301³, 303³
- 3 Chosen from THEO 315³, 317³
- 3 Chosen from THEO 206³, 320³, 322³
- 3 Chosen from THEO 331³, 332³, 334³, 336³
- 3 Chosen from THEO 351³, 353³
- 3 Chosen from THEO 234³, 340³
- 6 Chosen from any of the Theology offerings

With the permission of the Department, three credits in a cognate discipline may be substituted for a Theology elective.

24 Minor in Theological Studies

- 12 THEO 201³, 202³, 203³, 204³
- 12 Chosen from other Theology offerings

80 Certificate in Pastoral Caregiving

- 15 THEO 203³, 402³, 404³; AHSC 230³, 232³
- 3 Chosen from THEO 315³, 317³
- 3 Chosen from THEO 206³, 320³, 322³
- 3 Chosen from THEO 331³, 332³, 334³, 336³
- 3 Chosen from THEO 204³, 351³, 353³
- 3 Chosen from THEO 234³, 340³

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

THEO 201 Introduction to Theological Studies (3 credits)

The course introduces the student to the structure, nature, and method of theological studies and the relation of these studies to the other sciences.

THEO 202 Introduction to Biblical Studies (3 credits)

This course provides a survey of the contents of

the Bible, from Genesis to Revelation, and a practical introduction to the skills required to understand biblical texts. Attention is paid to diverse approaches to interpretation which are used in historical, literary, or theological study of the Bible, and also to appropriate strategies for the use of biblical texts in liturgy, homilies, and personal prayer.

NOTE: Students who have received credit for THEO 222 may not take this course for credit.

THEO 203 Introduction to New Testament (3 credits)

This course studies the four major kinds of writing found in the New Testament: Gospel, Letter, Apocalypse, Luke-Acts.

NOTE: Students who have received credit for THEO 310 may not take this course for credit.

Introduction to Christian **THEO 204** Ethics (3 credits)

This course is an introduction to the methods and themes of Christian ethics, the sources for moral decision making, the role of conscience, the basic moral teachings of Christian churches and their various positions on specific issues. NOTE: Students who have received credit for THEO 350 may not take this course for credit. NOTE: This course and THEO 210 meet the Comité Catholique theology requirements for those intending to teach religion in Québec Catholic primary schools.

THEO 206 The Origins of Christianity (3 credits)

A study of the historical origins of the Church with a view to understanding the creative originality of the Christian tradition. This study opens up possibilities for the rethinking of contemporary Christianity in the light of the common sources of diverse Christian tradition. NOTE: Students who have received credit for THEO 421 may not take this course for credit.

THEO 210 Contemporary Roman Catholicism (3 credits)

The course is intended as an introduction to contemporary Roman Catholicism, and treats Catholic history, world-view, communal worship, private prayer, ethics, and current trends. NOTE: This course and THEO 204 meet the Comité Catholique theology requirements for those intending to teach religion in Québec Catholic primary schools.

Theology and Myth (3 credits) **THEO 226** This course is a comparative study of mythology. The focus is on the role of myths in Christian theology, e.g. creation myths, origins of humanity, salvation myths, and others.

THEO 232 Christian Society and Culture (3 credits)

This course examines the sociological dimensions of Christianity throughout history. It is the study of the interchange between social forces and culture on the one hand and the doctrine and institutions of Christianity on the other.

THEO 234 Christian Spirituality (3 credits) The characteristics of Christian spirituality, its roots in scripture, the balance between contemplation and action, its communal dimension, its attitude to world, are analysed through the study of a selection of men and women whose lives exemplify various aspects of Christian spirituality over the past two

thousand years. The course examines notions of transcendence and immanence, individuality and collectivity, nature and the divine. NOTE: Students who have received credit for THEO 372 may not take this course for credit.

THEO 238 Theology in Film (3 credits) This course examines a series of films to uncover their theological preoccupations, motives, and

questions. Methods of analyses are discussed, in conjunction with screenings of selected films.

THEO 242 Theology and the Arts (3 credits)

This course is a theological reflection on various art forms (music, dance, visual arts, architecture) throughout the history of Christianity. NOTE: Students who have received credit for THEO 241 may not take this course for credit.

THEO 271 Women in Theology (3 credits) This course explores the emergence of a body of scholarly writing by women theologians. It looks at the questions raised and the critiques of traditional theological doctrines and interpretations, as well as suggesting different hermeneutical approaches to exegesis, theology, and history.

THEO 276 The Icon: Theology in Colour (3 credits)

The icon is both a theological medium and a theological message. The first is expressed by design, the latter by colour. The study of the icon offers the student an opportunity to explore theological meaning by means of image and symbolism as well as concept and reasoning.

Selected Topics in Theological **THEO 298** Studies (3 credits)

THEO 299 Selected Topics in Theological Studies (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

THEO 301 The Hebrew Bible: History and Texts (3 credits)

An introduction to the historical contexts in which the Hebrew Bible was written, to its various literary genres (historical, prophetic, and poetic), and to contemporary methods of interpretation.

THEO 303 The Old Testament in Theology (3 credits)

Selected texts from the Bible will be read in the light of contemporary scholarship, with attention to the use of these texts in theology, in worship, and in private prayer. The course focuses on the uses of the Bible, offering a critique of abuses in the past and present.

NOTE: Students who have received credit for THEO 300 may not take this course for credit. **THEO 315** Gospels and Acts (3 credits) This course is an introduction to the texts and teachings of the four canonical Gospels and to the Acts of the Apostles.

THEO 317 The Epistles and Revelation (3 credits)

This course is an introduction to the New Testament Epistles, and to the Book of Revelation, with a closer reading of selected texts.

THEO 320 History of Christianity: First Millennium (3 credits)

This course explores the historical foundations of the Church in the first five centuries, and the diverging experiences of the Church in East and West to the end of the millennium.

NOTE: Students who have received credit for THEO 423 may not take this course for credit.

THEO 322 History of Christianity: Reformation and Modernity

(3 credits)

This course explores the history of Christianity from the high Middle Ages through to the closing decades of the twentieth century, with special attention given to the ages of Reform and to the impact of the Enlightenment on the lifestyles, institutions, social attitudes, and intellectual life of modern Christians.

NOTE: Students who have received credit for THEO 425 may not take this course for credit.

THEO 331 The Christian Understanding of God (3 credits)

This course is the exploration of God as ultimate reality in Christian history, and in the context of contemporary issues such as world religions, gender, and new forms of language about God.

NOTE: Students who have received credit for THEO 430 may not take this course for credit.

THEO 332 Christology (3 credits)

This course is the examination of biblical and traditional sources of modern Christology; the scriptural terms of sin and salvation within the parameters of modern notions of person; and the implications of christological teachings for modern issues such as environment (eco-theology), culture, and social issues. NOTE: Students who have received credit for THEO 442 may not take this course for credit.

THEO 334 The Church Community (3 credits)

This course reflects on the various ways of understanding the Church as People of God, Body of Christ, Sacrament, Servant, Community of Disciples. The impact of ecclesial documents of various Christian denominations will be explored. NOTE: Students who have received credit for THEO 440 may not take this course for credit.

THEO 336 Word and Sacrament (3 credits) This course considers sharing of religious values through spoken word, Scriptures, iconic

representation, as well as the use of ritual and symbolic communication in sacramental actions, especially in baptism and eucharist.

NOTE: Students who have received credit for THEO 434 may not take this course for credit.

THEO 340 Private Prayer and Public Worship (3 credits)

Prayer is shown as a basic human act. The course will explore diverse traditions of the communal forms of worship as well as the many forms of private prayer that have been practised in Christian churches.

NOTE: Students who have received credit for THEO 370 may not take this course for credit.

THEO 351 Applied Ethical Issues (3 credits)

economic issues, war and peace.

This course explores controversial issues in areas of personal ethics (such as euthanasia, abortion, human sexuality, health care, aging), and social ethics such as social justice and

NOTE: Students who have received credit for THEO 390 may not take this course for credit.

THEO 353 Clinical Ethics (3 credits)

This course explores some of the more common problems in health-care ethics. The course makes a distinction between clinical ethics and medical ethics, in the sense that these topics will be discussed from within a multidisciplinary perspective.

THEO 398 Selected Topics in Theological Studies (3 credits)

THEO 399 Selected Topics in Theological Studies (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. NOTE: All 400-level Theology courses have as their prerequisite an appropriate 300-level Theology course, or its equivalent, with permission of the Department.

THEO 402 Pastoral Caregiving (3 credits) The course introduces the student to the history and theology of pastoral caregiving and the variety of associated problems.

THEO 404 Practicum in Pastoral Caregiving (3 credits)

Prerequisite: THEO 402 and permission of the Department. This course complements THEO 402 as the internship and field exploration of a particular pastoral caregiving. It will be supervised by experts or experienced individuals in the various fields of caregiving, e.g. eldercare, bereavement, hospital, school, youth ministries, and others.

Selected Topics in Theological Studies (3 credits) **THEO 497**

THEO 498 Selected Topics in Theological

Studies (3 credits)

THEO 499

Advanced Topics in Theological Studies (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.340

URBAN STUDIES

Faculty	Director JOHN ZACHARIAS, Associate Professor		
Location	Sir George Williams Campus J.W. McConnell Building, Room: LB 641 (514) 848-2050		
Department Objectives	of planned change in urban environments. Urban Stu involving field studies, planning projects, and the acc courses in Sociology, Political Science, Economics, a approaches and understanding in order to consider of designed for students planning to undertake a post-g	Urban Studies is a multidisciplinary programme, designed to introduce the student to the processes of planned change in urban environments. Urban Studies provides a core of urban-planning courses involving field studies, planning projects, and the acquisition of technical skills. Complementary courses in Sociology, Political Science, Economics, and Geography provide the necessary approaches and understanding in order to consider complex urban development. The programme is designed for students planning to undertake a post-graduate degree in planning or a related field and also provides required training for work in the planning, real estate, and social service fields.	
Programmes	Students are responsible for satisfying their particular. The superscript indicates credit value. Students should consult with the Director prior to regexempted from any required courses must replace the programme and approved by the Director. Similarly, a	istering for Urban Studies courses. Students nem with others that are relevant to the	
	For the following programmes URBS 230 ³ and UI courses in Anthropology and Sociology.	RBS 240³ may serve as prerequisites for	
	66 BA Honours in Urban Studies Stage I 12 URBS 230 ³ , 240 ³ , 250 ³ , 260 ³ 3 GEOG 220 ³ Stage II 9 URBS 333 ⁶ , 370 ³	Stage III 21 URBS 433 ⁶ , 438 ³ , 480 ³ , 483 ³ , 486 ³ , 487 ³ 3 Chosen from GEOG 430 ³ ; SOCI 450 ³ ; or other 400-level course 42 BA Major in Urban Studies	
	6 GEOG 330 ³ , 333 ³ 3 ECON 392 ³ 6 Chosen from ANTH 355 ³ ; ARTH 374 ³ ; HIST 369 ³ ; POLI 349 ³ , 352 ³ ; SOCI 315 ⁶ , 353 ³	Stage I 12 URBS 230³, 240³, 250³, 260³ 3 GEOG 220³ Stage II 9 URBS 333°, 370³	
	Stage III 24 URBS 433 ⁶ , 438 ³ , 480 ³ , 486 ³ , 487 ³ , 491 ⁶ 3 Chosen from GEOG 430 ³ ; SOCI 450 ³ ; or other 400-level course	3 ECON 392 ³ 3 Chosen from ANTH 355 ³ ; ARTH 374 ³ ; GEOG 330 ³ , 333 ³ ; HIST 369 ³ ; POLI 349 ³ , 352 ³ ; SOCI 353 ³ Stage III	
	 63 BA Specialization in Urban Studies Stage I 12 URBS 230³, 240³, 250³, 260³ 3 GEOG 220³ 	 6 URBS 433⁶ 3 400-level URBS course 3 Chosen from GEOG 430³; SOCI 450³; or other 400-level course 	
	Stage II 9 URBS 333 ⁶ , 370 ³ 6 GEOG 330 ³ , 333 ³ 3 ECON 392 ³ 6 Chosen from ANTH 355 ³ ; ARTH 374 ³ ; HIST 369 ³ ; POLI 349 ³ , 352 ³ ; SOCI 315 ⁶ , 353 ³	30 Minor in Urban Studies* 6 URBS 230³, 240³ 24 Chosen from URBS 250³, 260³, 333⁶, 370³, 433⁶, 438³, 480³, 486³, 487³; GEOG 220³, 330³, 333³ *Admission suspended for 2000-01.	

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

URBS 210 Urban Issues (3 credits)

This course presents contemporary issues regarding the city and includes a behind-the-

scenes look at how planning and development are carried out. The principles and practices of community planning are addressed to enable students to develop critical thinking skills about the metropolitan world in which they live.

URBS 230 Urban Development (3 credits)

This course examines how and why cities grow and change over time. The relationships between socio-cultural, economic, and physical aspects of urban development are considered at the local, city, and regional scales.

NOTE: Students who have received credit for URBS 280 may not take this course for credit.

URBS 240 Planning (3 credits)

This course considers the important role planning will have in shaping the world of tomorrow. The methods of planning used in public, parapublic, and private spheres of activity are introduced. The process for implementation of plans and the role of the planning professional are given special emphasis.

NOTE: Students who have received credit for URBS 280 may not take this course for credit.

URBS 250 Representation Methods in Urban Studies (3 credits)

This is an introduction to the analytical and practical skills associated with urban field studies. The emphasis is on the use of graphic media for the representation of the social, economic, cultural, and built environments. NOTE: Students who have received credit for URBS 290 or for this topic under a GEOG 299 number may not take this course for credit.

URBS 260 Analytical Methods in Urban Studies (3 credits)

This is an introduction to the analytical and practical skills associated with urban field studies. The emphasis is on the use of data sources and collection techniques along with analytical procedures appropriate to questions of urban planning and public policy.

NOTE: Students who have received credit for URBS 290 or for this topic under a GEOG 299 number may not take this course for credit.

URBS 333 Urban Laboratory (6 credits)
Prerequisite: URBS 250, 260. In this course, an urban problem is studied and solutions simulated. The emphasis is on first-hand knowledge of an area-based problem. Theory and case studies are used to develop appropriate interventions. Plans are prepared and evaluated.

NOTE: Students who have received credit for URBS 334 or for this topic under a GEOG 399 number may not take this course for credit.

URBS 370 Urban Systems (3 credits)
Prerequisite: URBS 230, 240; or second-year standing in a Geography or Engineering programme. The infrastructure of the city is considered from a systems standpoint. The provision of urban services by public and private providers is examined with respect to urban space. Systems encompass institutional,

transportation, and underground networks. This course is primarily concerned with the design and management of networks.

URBS 398 Selected Topics in Urban Studies (3 credits)

Special topics in urban studies.

URBS 433 Advanced Urban Laboratory (6 credits)

Prerequisite: URBS 333. This is an advanced course in urban design. An overview of current theory and practice is presented. An urban problem is developed and appropriate interventions are considered. These interventions are simulated and the results assessed.

URBS 438 Urban Ecology (3 credits)
Prerequisite: GEOG 220, 330; URBS 230; or
permission of the Department. The city is
viewed as an interdependent and interactive
system. The issues surrounding ecological,
economic, and socio-cultural sustainability are
examined in the context of the development of
public policy. The integration of a spectrum of
ecological approaches and standards is a major
theme in individual research projects undertaken
in the context of this course.

NOTE: Students who have received credit for URBS 488 or GEOG 438 may not take this course for credit.

URBS 480 *Impact Assessment* (3 credits) Prerequisite: URBS 370. The impacts of projects on urban and suburban communities and the environment are studied within the context of environmental protection legislation. The methods of assessment are then applied to specific cases.

URBS 483 Directed Studies/Practicum in Urban Planning I (3 credits)

Prerequisite: Completion of 60 credits; enrolment in the Specialization in Urban Studies. Through a case study or practicum of 120 hours with a private or public institution, or community interest group, students acquire experience in a professional working environment.

URBS 484 Directed Studies/Practicum in Urban Planning II (3 credits)

Prerequisite: Completion of 60 credits; enrolment in the Specialization in Urban Studies. Through a case study or practicum of 120 hours with a private or public institution, or community interest group, students acquire experience in a professional working environment.

URBS 486 Behaviour and the Environment (3 credits)

Prerequisite: GEOG 330; URBS 230. Human behaviour is seen both as a determinant and as an outcome of environment. Behavioural topics include perception and attitudes, spatial behaviour, spatial cognition, and time-path analysis. Student projects involve applying the theory to a location study, a facility management study, or other relevant application.

URBS 487 The Computer and Urban Planning (3 credits) Prerequisite: URBS 333. Students solve a

Prerequisite: URBS 333. Students solve a micro-scale urban-planning problem while they learn a computer-aided design programme. Tutorials in the computer lab are followed by individual project development.

URBS 491 Honours Thesis or Project (6 credits)

Prerequisite: Completion of 60 credits; enrolment in the Honours in Urban Studies. Students may

undertake independent, supervised research leading to the production of an Honours thesis. They may also undertake a major urban study leading to recommendations for public or private interventions.

NOTE: Students who have received credit for GEOG 491 may not take this course for credit.

URBS 498 Advanced Topics in Urban Studies (3 credits)

Special topics in urban studies.

31.400

COMPUTER SCIENCE

The Department of Computer Science offers a Minor in Computer Science available to students in the Faculty of Arts and Science. For further details on this programme, see §71.70.5.

31.500 COLLEGES, INSTITUTES AND SCHOOLS

The Faculty of Arts and Science is the largest Faculty in the University. In order to combat the depersonalization so often found in a large faculty, the Faculty of Arts and Science has created smaller, more manageable units offering a personalized approach to education. At present, there are five such units in existence: Liberal Arts College, Lonergan University College, School of Community and Public Affairs, Science College, and Simone de Beauvoir Institute. Each unit is composed of a group of students and fellows who are united by a particular philosophy of education. Each unit operates in much the same fashion. Normally a student admitted to the University will enrol in a specific department-based programme — a Major, Specialization, or Honours. Students in the Liberal Arts College may, however, elect to enrol in the College Major in Western Society and Culture instead of in a departmental programme. Similarly, students in the Simone de Beauvoir Institute may enrol in a Major programme in Women's Studies. Students attracted by the particular educational opportunities offered by one of the units will apply to the unit in question. Once admitted to the College, Institute, or School of their choice, students may benefit from the academic curriculum, the extra-curricular activities, and social and intellectual environment provided in each of these units. It is the goal of these units to assist students to broaden their specialized disciplinary education with carefully chosen electives, with specially designed tutorials, and with career-oriented advising, all set in a more personal and friendly "university college" environment. Each unit has a physical location of its own, where its students may gather to exchange ideas, whether in the classroom or in one of the lounges provided for such interaction. As well, there is a library of basic books and periodical literature. From time to time, there will be planned activities, special-interest seminars, and stimulating lectures by invited guest speakers. Each unit has a group of faculty members from within the University assigned as fellows or tutors, whose major function will be to act as student advisers. Together, students and fellows or tutors plan a carefully integrated undergraduate programme based on the philosophy of education promoted. The advantage of this approach to education is that students may utilize the resources of a large Arts and Science Faculty, yet still enjoy the effective interchange of ideas that only a small unit can provide.

31.515 CO-OPERATIVE EDUCATION

Through the Institute for Co-operative Education, the University offers programmes in the co-operative format in the Departments of Chemistry and Biochemistry, Economics, Études françaises, Mathematics and Statistics, and Physics in the Faculty of Arts and Science; in the School for Building and the Departments of Computer Science, Electrical and Computer Engineering, and Mechanical Engineering in the Faculty of Engineering and Computer Science; and in the Departments of Accountancy, Decision Sciences and Management Information Systems and Marketing in the Faculty of Commerce and Administration.

Co-operative programmes in the Faculty of Arts and Science are open to students who are enrolled in many of the Honours and Specialization programmes offered by the above Departments. As it becomes feasible the University may consider offering other disciplines in the co-op format. (Please see §24 of this Calendar.)

31.520

LIBERAL ARTS COLLEGE

Principal and Permanent Fellow GEOFFREY C. FIDLER, Associate Professor, Education

Vice-Principal and Permanent Fellow FREDERICK H. KRANTZ, Associate Professor,

Permanent Fellow HARVEY SHULMAN, Professor, Political Science

Core Fellow ARIELA FREEDMAN, Assistant Professor, Liberal Arts College

Fellows IRIS BRUCE, Assistant Professor, Liberal Arts College VIRGINIA NIXON, Coordinator, Art History and

Music FRANZISKA SHLOSSER, Associate Professor, History

Non-Teaching Fellows PAMELA BRIGHT, Associate Professor, Theological Studies ROSEMARY DRAGE HALE, Assistant Professor, Religion GEZA SZAMOSI, Principal, Science College

Associate Fellows CHRISTINE DAIGLE, Lecturer, Liberal Arts College ELAINE LANDRY, Assistant Professor, Philosophy

Adjunct Fellow IRVING H. SMITH

Location

Sir George Williams Campus Annex RR. Room: 103 (514) 848-2565

Objectives

The Liberal Arts College, a small community of fellows and students, provides a unique liberal arts emphasis within the Faculty of Arts and Science. Built on a core of eight courses, the multidisciplinary curriculum is designed to guide students in exploring the foundations and development of Western civilization and culture. The aim is to foster the major values of the Western tradition—those of critical thinking and respect for intellectual freedom.

The major goal of Liberal Arts College is to assist the student in the process of becoming an educated person. The College seeks to translate into modern idioms the traditional vision of education as a preparation for life. Its core courses and seminars, sharing a common concern with the changing nature of society and culture, aim at the development of an informed critical consciousness.

Emphasis is also placed on sharpening the basic expressive and analytic tools indispensable to social and cultural understanding. All College students are expected to present, or to acquire, a knowledge of a second language (normally, French), necessary for their research and to write and to express themselves clearly. Training in research techniques is stressed, and original, independent work encouraged.

Liberal Arts College, linking demanding general education to significant specialization, is committed to serious intellectual work. Through its curriculum, staff, standards, and academic environment, it hopes to communicate the excitement and creativity of such engagement to its students.

Liberal Arts College Admission and Programme Requirements

Students admitted to the University and seeking to enter the College must have a "B" average from cégep, or its equivalent. All students upon admission must demonstrate proficiency in English composition and a second language, or undertake necessary make-up work.* All applicants should apply through the Office of the Registrar; they should also call or write the College for an interview. Mature students are admitted to the College on the basis of an interview and an examination of their record. Full-time degree candidates will normally complete their College core curriculum within three academic years; part-time degree candidates should complete their College core curriculum within six academic years. Students who have been admitted to departmental Honours programmes must maintain a "B" average in their College core curriculum; all others must maintain a "C" average in their College core curriculum. All Honours students in the College are expected to undertake significant original work, on a staff-guided basis, in their final year.

*Les étudiantes et étudiants francophones devront donner la preuve de leur connaissance de la langue anglaise.

Staff

Faculty fellows chosen from the University's Departments form the staff of all College courses, seminars, and tutorials. Teaching fellows are resident in the College, as is its principal, who also teaches in the core curriculum.

Facilities

Liberal Arts College is located on Concordia University's downtown Sir George Williams Campus. Its seminar and tutorial teaching is done in the same building that houses the College's principal and core fellows. The College has student study areas, a course-materials library, and audio-visual facilities, as well as common room and a collection of important newspapers, journals, and periodicals. The College, the focus of an extra-curricular programme of visiting speakers and cultural events, is a place where the exchange of ideas and views generated in courses and seminars continues on a more informal basis.

Counselling

Close student-faculty contact and exchange is part of the Liberal Arts College's stress on serious intellectual work. Each student is assigned to a faculty fellow who acts as a personal adviser, and who follows the student's progress through the College, advising on the choice of disciplinary or area specialization. All students' work is evaluated annually by the principal and fellows.

College Council

Council, composed of fellows and students, is the formal decision-making body of Liberal Arts College. It meets regularly, chaired by the principal, as a forum in which current issues and future policy are discussed and decisions taken. Council is that body which ensures the democratic participation of all members of the College in its on-going academic and extra-curricular work.

Programmes

All Liberal Arts College students must take the core curriculum. These interrelated courses constitute a significant segment of the course work required for College-sponsored BA programmes. Liberal Arts College stresses Honours-level work, although a student may, with the permission of the College, combine the core curriculum with a departmental Specialization or Major programme, or with the Individual Studies programmes. Selected students may, with College permission, be admitted to the College's BA Major in Western Society and Culture.

 42
 Liberal Arts College — Core Curriculum
 Stage I
 Stage III

 18
 LBCL 2916, 2926, 2956
 6
 LBCL 4906

 Stage II

 18
 LBCL 3916, 3936, 3963, 3973

In addition to completing the core curriculum, students must meet the Faculty of Arts and Science degree requirements and complete a departmental Major, Specialization, or Honours programme, or the Individual Studies programme, or the Major in L.A.C. Western Society and Culture. The core curriculum may also be applied towards Specialization or Honours work in the Individual Studies Programme. (See §31.170 of this Calendar).

All College students must consult with a College adviser before selecting courses in other disciplines or fields. Generally, courses in the Liberal Arts College are open only to members of the College.

Honours candidates must maintain a "B" average in their College courses, with no grade lower than a "C". Students in a Major or Specialization programme must maintain a "C" average in their College courses, with no grade lower than a "D".

 42
 BA Major in Western Society and Culture
 30
 Minor in Western Society and Culture

 Culture
 Stage I
 18
 LBCL 291⁶, 292⁶, 295⁶

 18
 LBCL 291⁶, 292⁶, 295⁶
 Stage II
 12
 LBCL 391⁶, 393⁶

 18
 LBCL 391⁶, 393⁶, 396³, 396³, 397³
 LBCL 391⁶, 393⁶

 Stage III
 12
 LBCL 391⁶, 393⁶

The College advises students who are enrolled in the BA Major in Western Society and Culture to take, in addition, some form of concentrated study (Major, Minor, etc.) within a single Department or field of study.

Further information on core courses and College programmes generally may be obtained either by writing for the Liberal Arts College Informational Brochure or by calling the Liberal Arts College. Personal interviews with a fellow of Liberal Arts College may be arranged through the secretary.

Admission into a departmental Honours programme requires the approval of the Department.

Students seeking admission to a departmental Honours programme will be bound by the Honours requirements outlined in §16.2.3 of this Calendar.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LBCL 291 Structure and Dynamics of Western Civilization I (6 credits)

Prerequisite: Registration in the Liberal Arts College, or permission of the College. This course emphasizes the intellectual, cultural, and political traditions from the Biblical period and classical antiquity to the mid-seventeenth century. Texts studied are related to changing social and historical contexts. Primary sources may include *Genesis*, Plato, *Republic*, Marcus Aurelius, *Meditations*, Thomas Aquinas, *Summa Theologica*, Machiavelli, *Prince and Discourses*, and Spinoza, *Theological-Political Treatise*.

LBCL 292 Modes of Expression and Interpretation I (6 credits)

Prerequisite: Registration in the Liberal Arts College, or permission of the College. A study of major Western literary, religious, and philosophical traditions, involving the reading and interpretation of significant texts from antiquity to the mid-seventeenth century. Emphasis is placed on development of writing skills and interpretative analysis. Primary texts may include Homer, *Odyssey*, Plato, *Symposium*, Augustine, *Confessions*, Dante, *The Divine Comedy*, and Racine, *Phèdre*.

LBCL 295 History of Art (6 credits)
Prerequisite: Registration in the College, or
permission of the College. This course is an
integrated study of the nature of the visual arts
from antiquity to the twentieth century. Artistic
expression is examined through chronological
and thematic approaches, with attention to the
relation between art and society.

LBCL 298 Liberal Arts College Selected Topics (3 credits)

LBCL 299 Liberal Arts College Selected Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LBCL 391 Structure and Dynamics of Western Civilization II (6 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. This course emphasizes the intellectual, cultural, and political traditions from the mid-seventeenth century to 1914. Texts studied are related to changing social and historical contexts. Primary texts may include Locke, Second Treatise of

Government, Rousseau, The Social Contract, Wollstonecraft, A Vindication of the Rights of Woman, Marx, Capital, and Freud, Dora.

LBCL 393 Modes of Expression and Interpretation II (6 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. A study of major Western literary, religious and philosophical traditions from the mid-seventeenth century to 1914. Primary texts may include Stendhal, *The Red and the Black*, Diderot, *Le neveu de Rameau*, Goethe, *Faust*, Nietzsche, *The Genealogy of Morals*, and Baudelaire, *Les fleurs du mal*.

LBCL 396 History of Music (3 credits)
Prerequisite: LBCL 291; LBCL 292; LBCL 295.
This music history course is designed to introduce the important developments in the history of European music from the Classical period to the present day. Course content introduces students to musical structure, period styles, and selected works by major composers, setting these within their historical contexts.

LBCL 397 The Sciences and Society (3 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. The science component of the Liberal Arts College core curriculum emphasizes the nature of modern science, principally through its development across the nineteenth and twentieth centuries. Primary sources may include Darwin, *Origin of the Species* and Kuhn, *The Structure of Scientific Revolutions*.

NOTE: Students who have received credit for LBCL 493 may not take this course for credit.

LBCL 398 Liberal Arts College Selected
Topics (3 credits)

LBCL 399 Liberal Arts College Selected
Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LBCL 490 The Twentieth Century: Forms, Themes, Critiques (6 credits)

Prerequisite: LBCL 391; LBCL 393; or permission of the College. This course emphasizes key issues in contemporary society and culture. Major twentieth-century texts and documents — philosophical, literary, political, and artistic, as well as analytical materials drawn from history

and the social sciences, are read. Primary sources may include de Beauvoir, *The Second Sex, Bell, The Cultural Contradictions of Capitalism,* Woolf, *To the Lighthouse,* Levi, *Survival in Auschwitz,* Hayek, *The Fatal Conceit,* as well as theorists such as Foucault, Irigaray, Kristeva, McKinnon, Lévi-Strauss, Barthes, and Derrida.

LBCL 491 *Integrative Seminar* (6 credits)
Prerequisite: Permission of the College. Students who have received credit for LBCL 490 may register for LBCL 491 provided the subject matter is different.

LBCL 498 Liberal Arts College Advanced Topics (3 credits)

LBCL 499 Liberal Arts College Advanced Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.530 LONERGAN UNIVERSITY COLLEGE

Principal

WILLIAM P. BYERS, Professor, Mathematics and Statistics

Fellows

SHEILA ARNOPOULOS, Lecturer, Journalism JOANNA BOTTENBERG, Lecturer, Classics, Modern Languages and Linguistics PAMELA BRIGHT, Associate Professor, Theological Studies WILLIAM BUXTON, Professor, Communication Studies

MOIRA CARLEY, Lecturer, Lonergan University College

DAVID ELEY, s.j., Director, Loyola Peace Institute

FILIPPO SALVATORE, Associate Professor, Classics, Modern Languages and Linguistics

Emeriti Fellows

SISTER PRUDENCE ALLEN, RSM, Professor Emeritus, Philosophy

WOLFGANG BOTTENBERG, Retired Professor Emeritus, Music

MARK DOUGHTY, Professor Emeritus, Chemistry EDMUND EGAN, Retired Associate Professor, Philosophy

WYNNE FRANCIS, Professor Emeritus, English LEONARD R. MENDELSOHN, Retired Associate Professor, English

Adjunct Fellow

WENDY SIMON, Print Media and Photography

Location

Loyola Campus 7302 Sherbrooke Street West (514) 848-2280

Objectives

The members of Lonergan University College seek to engage in interdisciplinary dialogue about fundamental questions of value in culture, art, science, and religion. The College is dedicated both to studying Bernard Lonergan's interdisciplinary approach and to fostering students' capacities for interdisciplinary dialogue.

As teachers and students of traditional disciplines in the University, members participate in a Fellows seminar, student seminars, and lectures at the College.

Dedication

Lonergan University College is named in honour of Dr. Bernard F. Lonergan, a former student, and later a professor at Loyola College, Montréal. Dr. Lonergan's work has been recognized throughout the world and is the subject of several hundred books and dissertations. Recently, an international Journal of Lonergan Studies has been initiated in the United States.

General Philosophy

Lonergan University College exists for those students and professors who believe in an education beyond the current tradition of depersonalized and compartmentalized knowledge. Lonergan students maintain a regular department-based programme of studies. At the same time, however, they share with others the dynamics of human enquiry that transcends the narrowness of disciplinary methodologies.

Inquiry into "Value"

The Fellows of Lonergan University College are convinced that the deepest issues of life are implicitly involved in all the academic disciplines, and that both honesty and sanity demand that we attend to this fact and reflect upon it.

The scholarship of the College is clearly concerned with values: they may be values centred on the question "should it be done?" as opposed to "can it be done?"; they may be values so entrenched in fundamental assumptions as to appear self-evident and beyond argument; or they may be values considered by some to be ultimate and beyond rational understanding. In each case, the value systems are exposed and critically analysed, allowing the individual to come to his or her own conclusions.

Method

The College has adopted an educational strategy which is interdisciplinary and empirical. This strategy is interdisciplinary and multi-disciplinary because central and ultimate issues of human life are involved in all disciplines; yet many of these issues overlap the traditional boundaries of knowledge and must be analysed without the dominance of any one perspective.

This strategy is empirical in the sense that all knowing begins with enquiry about experience of the world and of ourselves as subjects. Resulting judgement of truth and value must be verified through a methodologically precise appeal to this experience. Following this strategy, Lonergan students use their departmental study as a resource to be shared and extended by working with students and Fellows from other Departments on a common intellectual project as determined by one of the Lonergan courses.

The work and method of Bernard Lonergan are studied by many of our students. His influence is reflected in the concept of education at the College whether or not students choose to study his work explicitly.

The Style of the College

Lonergan University College offers its students all the resources of Concordia University. Lonergan students take a regular degree programme in the Department of their choice on either of the two campuses of Concordia University. Moreover, the College aims to contribute to a style of life which will heighten intellectual experience and enrich personal growth during the student's university years. It does this, not by claiming to "raise standards", but rather by demanding that its students relate what they learn to their personal lives and deeper values.

A university is the place where the universe should be discussed and intellectually appropriated. Conversation, as much as courses or research, is at the heart of university life. It is precisely this aspect of university life that has been undermined in this century by the incredible growth in knowledge itself, and by the proliferation of specialities. What universal knowledge is now possible? What do students have in common to discuss?

Lonergan University College believes that there is something in common to be discussed, and dedicates its resources to assure the depth and vitality of that discussion. It involves all its members, both students and Fellows, in structured conversation that will grow in breadth and meaning through the three years of a student's university career.

Membership

Students may join the College with an intention to register for a LUCC course, and after an interview with the College principal. Students are entitled to use the College lounges and resource centre, to participate in the social and intellectual activities of the College, and to be a member of the Lonergan University College Student Association.

Students must fulfil the degree requirements of their own Faculty, and must be enrolled in either a departmental or interdisciplinary Major, Specialization or Honours programme.

Once students have completed 12 credits of LUCC courses, they meet the requirements for membership in Lonergan University College. They will be graduated officially as Lonergan students and will have this fact noted on their transcripts.

Programme

24 Minor in Lonergan Interdisciplinary Studies

Those students who are members of Lonergan University College, and who want to strengthen the academic component of their work in the College, may take the following academic minor:

- 3 LUCC 2023 The Creative Self
- 12 LUCC 399⁶ Lonergan College Seminar: the theme of the Lonergan College Seminar changes yearly. The seminar must be taken twice at six credits each time for a total of 12 credits
- 9 credits at the 300 or 400 level

College Facilities and Activities

The College is governed by a set of by-laws, and by a College Council composed of students and Fellows.

The central activity of the College is its weekly seminar. The seminar focuses each year on the work of a major thinker, one who has decisively influenced our culture for good or for evil. The topic will change each year, but the depth of human integration and social awareness of the authors we choose ensures continuity in our discussion. As participants in the seminar are competent in diverse academic disciplines, an understanding of the topic develops which on the one hand does justice to the diversity of contemporary awareness, and on the other demands levels of understanding which transcend technical jargon. An internationally recognized scholar will be invited to come to Lonergan University College as the "Distinguished Visiting Scholar", to lead the College seminar. The Visiting Scholar will also give university lectures and public addresses, as deemed appropriate.

Each student of Lonergan University College joins with a small number of others to form a seminar group. College Fellows will direct the group and be available for academic advising to students. These groups will meet for two hours every week.

Students and Fellows will be encouraged to share in College government, to participate in College events, and, in various ways, to make the College the centre of their lives at the University. The College offers a comfortable lounge, a specialized library, and several quiet rooms for study. It also has a research centre for Lonergan studies with a complete set of manuscripts, and of published works.

Admissions and Applications

Students seeking admission to the College should fill in the appropriate section (Box D) of the University Admissions Application form. Interested students may also contact the College directly by telephoning, or by coming to the College, or else by writing to the College at the following address: 7141 Sherbrooke Street West, Montréal, Québec, H4B 1R6. Each candidate for admission will be invited to an interview with the principal.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LUCC 202 The Creative Self (3 credits)

This course is cross-listed with INTE 202. This course explores the relationship between experience, understanding and coming to knowledge as a contemporary person in search of identity. It is structured around the exploration of these questions: How can life experience become a source of creative understanding? How can the learning process become one's own? What methods are available to help us learn how to learn? How can we learn to live what we know?

NOTE: Students who have received credit for LUCC 200 or INTE 202 may not take this course for credit.

LUCC 298 Introduction to Selected Interdisciplinary Problems

(3 credits)

LUCC 299 Introduction to Selected Interdisciplinary Topics

(6 credits)

Specific topics for these courses will be stated in the Undergraduate Class Schedule.

LUCC 333 Interdisciplinary Approaches to the Study of Peace (6 credits)

This course is cross-listed with INTE 333. This course aims to introduce students to the study of peace and enable them to think critically about contemporary circumstances that condition the search for peace. Using specific case studies and appropriate methodologies, the course examines the role of values, cultures, and ideologies in the attainment of peace. This course is presented in cooperation with the Loyola Peace Institute.

NOTE: Students who have received credit for LUCC 499A or INTE 333 or 499A may not take this course for credit.

LUCC 398 Special College Seminar (3 credits)

Students who for good reason cannot follow the regular College Seminar (LUCC 399) meet every second week for two semesters or every week for one semester, under the direction of a College Fellow. The same text is read as in the regular seminar, and the discussion has the same aim.

LUCC 399 Lonergan College Seminar (6 credits)

Every year, faculty and students at the College

engage in the study of a major thinker who has decisively influenced Western culture (e.g. Gandhi, Arendt, Dostoevsky, Galileo, Nietzsche, Freud, Darwin), or from time to time, a theme which the College Council feels to be particularly appropriate (e.g. Literary Criticism, Contexts of Canadian Cinema). The course is directed by a Visiting Scholar with particular expertise in the person or theme under discussion. The Visiting Scholar meets with the faculty and students bi-weekly and on the following week the students meet in small groups with individual Fellows.

LUCC 410 The Works of Bernard Lonergan (3 credits)

This course is cross-listed with INTE 410. This course engages students in the task of integrating their specific fields of studies into the more general enterprise of human knowing and deciding. It reflects upon this experience with the aid of Bernard Lonergan's methodology. The texts are selected from the work of Lonergan. NOTE: Students who have received credit for INTE 410 may not take this course for credit.

LUCC 441 Issues in Contemporary Values (3 credits)

This course is cross-listed with INTE 441. This course addresses central questions concerning what we love or detest, embrace or reject, prescribe or proscribe; what resources of human being, e.g. philosophical, psychological, or artistic, are implicitly or explicitly drawn upon in these choices; whether the choices we make are mere "preferences", or have objective status as values; and how these questions relate to the problems of our culture and our time. Through alternating emphases and faculty, the focus is changed from time to time. NOTE: Students who have received credit for LUCC 440 or INTE 440 or 441 may not take this course for credit.

LUCC 498 Lonergan University College Selected Problems (3 credits)

LUCC 499 Lonergan University College **Selected Topics** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.540 SCHOOL OF COMMUNITY AND PUBLIC AFFAIRS

Principal

DANIEL SALÉE, Professor, School of Community and Public Affairs, and Political Science

Vice-Principal

MARGUERITE MENDELL, Associate Professor, School of Community and Public Affairs

Fellows

SHEILA ARNOPOULOS, Lecturer, Journalism WILLIAM BUXTON, Professor, Communication Studies

ANDREW B. GOLLNER, Associate Professor, Political Science

KARI LEVITT, Professor Emeritus, Economics, McGill University

Principal, Simone de Beauvoir Institute
ALAN NASH, Associate Professor, Geography
LORNA ROTH, Associate Professor,
Communication Studies
FILIPPO SALVATORE, Associate Professor,
Modern Languages and Linguistics
MARIE-FRANCE TURCOTTE, Assistant
Professor, Management
JOHN ZACHARIAS, Associate Professor and
Director, Urban Studies

CHANTAL MAILLÉ, Associate Professor and

Associate Fellows

HUBERT GUINDON, Professor, Sociology MARVIN HERSHORN, Lecturer, Political Science

Location

Sir George Williams Campus Annex CI, Room: 101 (514) 848-2575

Objectives

The School of Community and Public Affairs (SCPA) offers a multidisciplinary programme in public policy analysis. The School prepares its graduates to be knowledgeable participants in the policy-making process in the private, public, and community sectors.

An innovative combination of academic and practical training exposes students to a wide range of public issues. In small classes encouraging participation, students develop specialized abilities to do research, to communicate, and to organize public consultations and debates. An internship programme also enables students to gain the necessary experience of working in a public affairs job.

The School will be of interest to excellent students in a variety of disciplines, including economics, history, political science, sociology, urban studies, journalism, communication studies, and business. While some of our students enter the work force upon completion of their undergraduate degree, the majority continue their education. SCPA graduates tend to do graduate work either in their disciplines or, more often, in professionally-oriented programmes including Public or Business Administration, International Affairs, Industrial Relations, and Law.

The historic Mackay Street building which the School occupies is an ideal site for small classes, public lectures, social events, and meetings. School facilities include a common room, a reading room and documentation centre, a seminar room, a computer room, and faculty and student offices.

Programme

Students who enrol in the School of Community and Public Affairs will follow a programme composed of the following elements:

1. The Core Courses (36 credits)

All students must take the following:

ECON 201	Introduction to Microeconomics (3 credits)	POLI 211	Québec Politics and Society/ La vie politique québécoise
ECON 203	Introduction to Macroeconomics		(3 credits)
	(3 credits)	SOCI 203	Introduction to Society (3 credits)
HIST 205	History of Canada,	SCPA 300	Integrative Seminar (6 credits)
	Post-Confederation (3 credits)	SCPA 401	Modular Seminar (3 credits)
POLI 204	Introduction to Canadian	SCPA 411	Internship (3 credits)
	Politics (3 credits)	SCPA 412	Research Seminar (3 credits)

3 credits Chosen from SCPA 498³, COMS 461³, SOCI 353³, MANA 266³

NOTE: Students who take one or more of the required courses as part of their degree programme must replace the credits with a course chosen in consultation with the SCPA adviser. Under special

circumstances, a student may replace one of the elective courses with a course chosen in consultation with the SCPA adviser.

The Disciplinary Programme

Members of the School of Community and Public Affairs must also pursue a departmental or interdisciplinary Honours, Specialization, or Major programme.

Performance Requirement and Exemptions Policy

Students are required to maintain an average of "B-" in the core courses of the School and an overall average of "C". In addition, all members of the School are expected to participate in its

Where exemptions are granted for any of the Core courses, students are required to replace them with an equal number of credits chosen in consultation with the SCPA adviser.

Entrance Requirements

Students admitted to the University and seeking to enter the School must have achieved a "B" average, or the equivalent at the previous educational level. Students wishing to enter the School will be interviewed personally. In exceptional circumstances, a candidate who has failed to meet the grade requirement will be admitted on the basis of a personal evaluation of potential capacities, as against those realized in previous studies. Each student enrolled in the School will have to demonstrate a working knowledge of English and French.

For further information on curriculum, programmes, personnel, and objectives, please call the principal at 848-2575.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SCPA 298	Selected Topics in Community	
	and Public Affairs (3 credits)	

SCPA 299 Selected Topics in Community and Public Affairs (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCPA 300 Integrative Seminar (6 credits) Prerequisite: Permission of the School of Community and Public Affairs. This course takes a multidisciplinary approach to the problems of decision-making and policy formulation, with particular attention paid to the complex interaction among groups and institutions in society. The course is designed to provide insights into the design, implementation, and evaluation of policies. Special emphasis is placed on data and information analysis and communication skills. Topics covered include the state and public policy; business, government and society; labour and unions; non-profit and community groups; interest groups and policy agendas; media and society; international institutions.

SCPA 398 Special Area Study in Community and Public Affairs (3 credits)

SCPA 399 Selected Topics in Community and Public Affairs (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. SCPA 401 Modular Seminar (3 credits) Prerequisite: SCPA 300 and permission of the School of Community and Public Affairs. This seminar is normally taken by students in their second year. Under the direction of a Fellow, the seminar consists of a series of "modules" of approximately three weeks' duration. The modules are both skill and problem oriented and draw on the expertise of both academics and practising professionals drawn from public and private agencies. Topics vary from term to term, but focus on specific functions and areas in public affairs in order to equip students with a range of skills needed to pursue careers in the field.

SCPA 411 Internship (3 credits) Prerequisite: Permission of the School of Community and Public Affairs. An essential part of the School's programme is a one-semester apprenticeship in some aspect of community and public affairs. After completing 60 credits of the BA programme, including a significant portion of the School's core, students are required to complete a practicum that will allow them to test their ideas in a real situation. Placements may be drawn from all areas of possible employment, including the private sector, government and community service organizations. Students are expected to participate fully in finding and defining possible internships. Employers are asked to join in an evaluation of the work period. Students are required to submit a written report which summarizes and evaluates their work experience.

SCPA 412 **Research Seminar** (3 credits) Prerequisite: SCPA 411. Students who have completed their internship are required to define a set of problems, normally based on some aspect of their practical experience. They then define a policy agenda on which further research is undertaken. Working in groups, they organize a series of seminars relating to the policy agenda. These seminars are presented by academics and practising professionals and are open to all members of the School. In unusual circumstances, SCPA 412 may be taken concurrently with SCPA 411 with permission of the School.

SCPA 498 Advanced Seminar in

Community and Public Affairs

(3 credits)

SCPA 499 Advanced Topics in

Community and Public Affairs

(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCIENCE COLLEGE

Principal **GEZA SZAMOSI**

Fellows

PAUL J. ALBERT, Professor, Biology PETER H. BIRD, Professor, Chemistry and Biochemistry

JOHN CAPOBIANCO, Professor, Chemistry and Biochemistry

DAVID CHEEKE, Professor, Physics LUC-ALAIN GIRALDEAU, Associate Professor,

JAMES GRANT, Associate Professor, Biology RICHARD L. HALL, Professor, Mathematics and Statistics

DAVID JACK, Assistant Professor, Chemistry and Biochemistry

PAUL JOYCE, Associate Professor, Chemistry and Biochemistry

CALVIN S. KALMAN, Professor, Physics

HERSHY KISILEVSKY, Professor, Mathematics and Statistics

CLEMENT LAM, Professor, Computer Science EDWARD J. MALY, Professor, Biology SHEILA MASON. Associate Professor. Philosophy

JOHN McKAY, Professor, Computer Science ELAINE B. NEWMAN, Professor, Biology (Founding Principal)

ROBERT M. ROY, Professor, Biology RAMESH C. SHARMA, Associate Professor, **Physics**

PETER SHIZGAL, Professor, Psychology JANE STEWART, Professor, Psychology REGINALD STORMS, Professor, Biology MANFRED SZABO, Professor, Mathematics and Statistics

MICHAEL von GRUNAU, Professor, Psychology

Location

Sir George Williams Campus Annex X. Room: 105 (514) 848-2595

Objectives

The aim of the Science College is to prepare students enrolled in one of Concordia's science programmes for a life of research, teaching, or some similarly demanding intellectual pursuit in a profession. The academic programme of the College complements the regular undergraduate curriculum and includes cross-disciplinary courses and student participation in laboratory research activities from the first year on. The collegial atmosphere fosters interaction among students and between students and faculty.

In Science College, students will gain an understanding of several areas of science, while specializing in whichever one they choose. Curricular structures frequently restrict students to a single discipline. To help counteract excessive specialization, the Science College has designed a series of courses to show what practising physicists think about physics; what mathematicians do when they are thinking mathematics: — not "an introduction to", but "the state of the art".

The College provides an opportunity for students to become acquainted with science as practised and understood by scientists today. Its curriculum is planned to fulfil the primary goals of the College — to provide an opportunity for experience in a research environment, for thinking about the nature of science, and for becoming aware of the style and content of the various scientific disciplines.

In Science College, students have the opportunity to work individually with active research scientists. This is done through a programme of directed or independent study in each undergraduate year which enables them to undertake or participate in projects of discovery in a variety of different areas of scientific endeavour.

Students of the College will also be provided with an opportunity to consider the nature of science. The College offers courses in the intellectual and social context of science. Designed specifically for College students, these courses raise questions of broad interest to scientists and presume an understanding of the subject matter of science itself.

Students will also be given the opportunity to consider the social and cultural framework of their science studies through a basic course in some aspect of humanistic studies.

Finally, students will be encouraged to appreciate the link between clarity of thought and clarity of expression, through the availability of tutorial assistance in the development of writing skills.

Facilities

The College has study and lounge areas, computer facilities, a small library, and a few periodicals of general interest. The College offers students the opportunity and facilities to discuss matters of interest among themselves and with their professors. Science College also offers a number of courses and invites scientists to visit the University to meet College students.

Requirements for Admission to Science College

The programme of Science College is academically demanding, involving concentration in one discipline and a critical investigation of other aspects of science. The College is committed to serious academic work and high standards, and seeks to attract talented and enthusiastic students who are willing to work hard in a search for a deeper understanding of their subject.

Science College represents a new departure at Concordia's downtown campus. Students must enrol in a science programme that leads to a BSc degree in order to be part of Science College. Students registered for a BA in Journalism are also eligible, as are students registered in the General Science Option of Computer Science.

In addition to the normal requirements for admission to the University's various programmes, applicants are expected to have a good academic average. They will be considered on the basis of their academic record, and a personal interview. Preference will be given to students who show a disposition and an aptitude to profit from the unique features of the sort of fundamental scientific education which the College offers. Applicants are encouraged to provide evidence of the range of their intellectual interests and of any creative activity in which they may have been involved. Students must be prepared to attend courses at times outside the normal University schedule. The College is open to full-time students only.

Science College and Journalism

A limited number of students who have been admitted to the Major in Journalism programme may be allowed to register in the Science College, with a view to combining a basic understanding of science with a training in journalism. For such students, a second six-credit course in the historical, philosophical, and social aspects of science will be offered. Other members of the College will have the option of taking this course if they so desire.

Performance Requirement

Students in the College must maintain a "B" average in courses offered by the College, with no grade lower than a "C".

Further Information

Further information on the courses and activities of the Science College may be obtained either by writing or by telephoning the College office. Personal interviews with a fellow of the Science College may be arranged through the Science College office.

Science College Core Curriculum

The College offers a core of courses which is required of all students. This core consists of 30 of the 90 credits normally required for a BSc degree. These courses have been developed specifically for the College with the intention of providing a unique, integrated programme of education in science.

Programmes

In addition to completing the core curriculum, students are responsible for satisfying their particular degree requirements by completing a departmental Honours, Specialization, or Major programme leading to a BSc.

The superscript indicates credit value.

30	Science College Curriculum	6	Chosen from LBCL 2916, 2926
3-9	Chosen from SCOL 251 ³ , 252 ³ , 253 ³ ,	6	SCOL 290 ³ , 390 ³
	351 ³ , 352 ³ , 353 ³	6	SCOL 490 ⁶
6	SCOL 270 ⁶	3-9	SCOL 398 ³ *

*This course may be repeated twice for credit in this programme provided the subject matter is different.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SCOL 251 Current Issues in Physical Sciences I (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. These

courses are designed to help students understand the "state of the art" in fields of science in which they are not specializing. They discuss problems under current study, and attempt to identify possible future directions of research. The approach is qualitative. Detailed technical knowledge is not prerequisite.

SCOL 252 Current Issues in Biological Sciences I (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 253 Current Issues in Mathematical and Related Sciences I (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 270 Historical, Philosophical, and Social Aspects of Science

(6 credits)

Prerequisite: Membership in the Science College, or permission of the College. This course discusses the intellectual framework of science and the relationships between science and society, and the political and philosophical questions inherent in the scientific process. Students are expected to understand the scientific issues at the level at which they were originally addressed.

SCOL 290 Directed and Independent Study I (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. The student works under the supervision of a member of the Faculty on either a practical laboratory project or a literature study. A formal, written report is required.

SCOL 298 Selected Topics in a Scientific Discipline (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCOL 351 Current Issues in Physical Sciences II (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 352 Current Issues in Biological Sciences II (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 353 Current Issues in Mathematical and Related Sciences II

(3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 390 Directed and Independent Study II (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL 290 registers for SCOL 390. Students are encouraged to work in a field different from that of their SCOL 290 project.

SCOL 398 Topics for Multidisciplinary Study (3 credits)

The purpose of this course is to introduce students to problems and areas of study which transcend traditional disciplinary barriers. A chosen area of investigation is treated from the viewpoint of various disciplines. Lecturers from different areas may be used for this purpose. The aim is to show the contributions made by each field to the understanding of the problem, and how they complement each other.

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCOL 490 Directed and Independent Study III (6 credits)

Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL 390 registers for SCOL 490. Students are encouraged to work in a field different from that of their SCOL 290 and 390 projects. Students complete a research project approved in advance by the College, under the supervision of a fellow of the College and/or a faculty member in a scientific discipline. NOTE: After consultation with the Science College, a student may register in BIOL 490, CHEM 450, GEOL 414, or PSYC 430 and upon successful completion be exempted from SCOL 490.

SCOL 498 Advanced Topics (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SIMONE DE BEAUVOIR **INSTITUTE AND WOMEN'S STUDIES**

Interim Principal FRANCES SHAVER, Vice-Dean, Student Affairs

Associate Professor CHANTAL MAILLÉ

Fellows STANLEY G. FRENCH TREVOR GOULD HEATHER MACKENZIE CATHERINE MAVRIKAKIS CHANTAL NADEAU DIANA PEDERSEN LORNA ROTH ROSEMARIE SCHADE

Research Associates/Independent Scholars ANNA ANTONOPOULOS-ALEXANDER MICHIKO ARAMAKI **ROKSANA BAHRAMITASH**

ARMELLE CHITRIT KARIN DOERR YAËL GLÜCK DANA HEARNE ELIZABETH HENRIK E. SUSAN HOECKER-DRYSDALE NILIMA MANDAL-GIRI BARBARA MEADOWCROFT

Adjunct Fellows/Independent Scholars DOINA LECCA MARGARET SHAW

Honorary Lifetime Fellows ARPI HAMALIAN PATRICIA MORLEY GAIL VALASKAKIS JO VELLACOTT MAÏR E. VERTHUY KATHERINE E. WATERS

Location

Sir George Williams Campus Annex MU, Room: 202 (514) 848-2370

Objectives

The Institute strives to stimulate the investigation and understanding of the role of women in society and to encourage women to develop their creative potential. In research and teaching, special attention is given to gender, race, class, and sexual orientation.

The Institute has several objectives: to investigate the history, current situation, and changing needs of women; to generate support for research topics relevant to women; to encourage full recognition of women's contribution to human achievement; to ensure that women and gender issues are studied in a non-discriminatory manner; to strengthen women's rights and the conditions for exercising them; to ensure the equality of all individuals without distinction of race, sex, age, language, or religion. Women's Studies encompass and modify all areas of knowledge. Through the introduction of new perspectives and new research, this field of study helps to correct and complete the traditional scholarly record. It is in essence interdisciplinary and multidisciplinary since the specificity of the condition of women embraces all existing disciplines. It thus questions the concept and structures of knowledge contained within the disciplinary boundaries and contributes to bringing about a reunification of the knowledge and scholarship that has become increasingly fragmented.

SIMONE DE BEAUVOIR INSTITUTE

Founded in 1978 to promote the understanding of the historical and contemporary situation of women in society, the Simone de Beauvoir Institute of Concordia University helps women to discover and develop their potential, both by its academic base in Women's Studies and by its co-curricular activities. We are honoured that Simone de Beauvoir authorized us to use her name, and expressed great interest in being informed of our activities.

All students registered in the Major, Minor, or Certificate in Women's Studies are members of the Institute. Other undergraduate students are welcome to become members if they undertake to complete nine credits of WSDB courses. The choice of these courses must be approved in advance by the principal or her delegate.

The co-curricular life of the Institute is extremely important, and all members are expected to contribute to our activities. Exciting opportunities are available to organize workshops, colloquia, and debates on subjects which interest the members, as well as to collaborate with women's organizations outside the University on research projects and other joint ventures.

Admission Requirements for the Simone de Beauvoir Institute

Students may apply simultaneously to Concordia University and the Simone de Beauvoir Institute by filling out and submitting the Concordia University Application for Admission with the box for "colleges" checked and "Simone de Beauvoir Institute" written in the space provided. The Admissions Application Centre will inform us of your application as soon as they receive it. Further information about the Institute can be obtained by calling us or by visiting our offices.

Programmes

Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

Students should consult with the Women's Studies adviser prior to registering for Women's Studies

60 **BA Specialization in Women's Studies** Group I

- WSDB 290³, 291³, 292³
- 6 WSDB 380³, 480³
- 12 WSDB 381³, 382³, 383³, 390³, 391³, 392³
- 12 WSDB 490³, 491³, 496⁶
- 3 WSDB at the 400 level Group II
- 18 Chosen in consultation with the Women's Studies adviser from WSDB 298³, 398³. 498³; AHSC 253³; CLAS 261³; COMS 368³; ECON 397³; EDUC 321³; ENGL 289⁶, 331³, 351³; FLIT 362³, 471³ 472³, 474³; FRAN 254³; HIST 329³, 331³ 478³; POLI 309³, 326³, 328³; PSYC 368³, 391³; and all Women and Religion courses; SOCI 272⁶, 276⁶, 374³; ANTH 3083; and from the Faculty of Fine Arts: FMST 3293, 4093; WFAR 3206, 4206

NOTE: Students are admitted based on a letter of intent to be evaluated by the Women's Studies Undergraduate Committee. Students are expected to maintain an overall WGPA of 3.0.

BA Major in Women's Studies Group I

- 9 WSDB 290³, 291³, 292³
- 6 WSDB 380³, 480³
- Chosen from WSDB 390³, 391³, 392³ 6
- Chosen from WSDB 490³, 491³

Group II

Chosen in consultation with the Women's Studies adviser from List A

Minor in Women's Studies 30

Group I

- 9 WSDB 290³, 291³, 292³
- WSDB 380³, 480³ 6
- Chosen from WSDB 390³, 391³, 392³ 6
- Chosen from WSDB 490³, 491³ Group II
- Chosen in consultation with the Women's Studies adviser from List A

30 Certificate in Women's Studies Group I

- WSDB 290³, 291³, 292³
- WSDB 380³, 480³
- Chosen from WSDB 390³, 391³, 392³
- Chosen from WSDB 490³, 491³ Group II
- Chosen in consultation with the Women's Studies adviser from List A

Students may transfer into the Certificate programme up to 12 credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

LIST A

 $\begin{array}{l} \text{WSDB 298}^3, \ 381^3, \ 382^3, \ 388^3, \ 398^3, \ 498^3; \ \text{AHSC 253}^3; \ \text{CLAS 261}^3; \ \text{COMS 368}^3; \ \text{ECON 397}^3; \\ \text{EDUC 321}^3; \ \text{ENGL 289}^6, \ 331^3, \ 351^3; \ \text{FLIT 362}^3, \ 471^3, \ 472^3, \ 474^3; \ \text{FRAN 254}^3; \ \text{HIST 329}^3, \ 331^3, \ 478^3; \\ \end{array}$ POLI 309³, 326³, 328³; PSYC 368³, 391³; RELI all courses under Women and Religion; SOCI 276⁶, 378⁶, 474³; ANTH 276⁶; SPAN 430³; FMST 329³, 409³; WFAR 320⁶, 420⁶

NOTE: Students should consult the appropriate Departments concerning possible prerequisites for the courses in List A.

NOTE: WSDB 290 and 291 are also offered in French. For additional information, please consult the Undergraduate Class Schedule.

Language/Langue

Les règlements actuels permettent à toute étudiante et tout étudiant d'écrire ses devoirs ou examens en anglais ou en français dans tous les cours offerts, à l'exception des cours de langue. La langue d'enseignement sera normalement l'anglais.

Non-francophone students may equally submit assignments in English in Français 451, 476, and 477, as long as they are taking the course for credit in Women's Studies or as an elective, and not as part of a programme of the Département d'études françaises.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

WSDB 290 Introduction to Women's Studies I (3 credits)

This course provides an introduction to the lives and conditions of women in historical contexts. It is suited both to those interested in women's issues in general and students enrolled in Women's Studies. Topics range from lesbianism, motherhood, violence, racism, and family to women's economic status, and women's resistance.

WSDB 291 Introduction to Women's Studies II (3 credits)

This course looks at the lives and conditions of women in recent times; it explores systems of domination and women's resistance to them. It investigates how women have empowered themselves within these systems and have struggled for, and achieved, change. Topics may include women's organizations, socialization, education, language, economic and political structures.

Feminisms and Research WSDB 292 Methods (3 credits)

Prerequisite: Enrolment in a Women's Studies programme or permission of the Institute. This course exposes students to a variety of research practices such as: oral history, case studies, multi-media representation, survey/ content analysis, library research, and field work. It encourages students to think critically, and to improve their ability to gather, analyse, and effectively present ideas and information.

WSDB 298 Selected Topics in Women's Studies (3 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

WSDB 370 Workshops in Special Areas of Women's Studies (3 credits)

Prerequisite: WSDB 290; WSDB 291. The purpose of these workshops is to examine a number of topics and problems related to the field of Women's Studies. The issues considered may differ from year to year; several workshops are offered over one academic year and students are required to select two workshops of one and a half credits each or three workshops of one credit each from the package. The workshop format is designed to allow Women's Studies students to participate in learning opportunities with flexibility in scheduling as well as to benefit from the experience of experts who visit Montréal on a short term basis. Possible topics are women and biotechnology; education of immigrant women, women and continuing education; women and pressure groups.

WSDB 380 Feminist Thought I (3 credits) Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course seeks to deconstruct the ideological premises of knowledge-production and provides an overview of various modes of knowledge, theory, and activism among women in different cultural contexts. These types of knowledge range from storytelling to academic theorizing. The course provides key concepts and critical approaches for Feminist Thought II.

NOTE: Students who have received credit for WSDB 394 may not take this course for credit.

WSDB 381 First Nations' Women (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course aims to acquaint students with North American First Nations, particularly the women's contemporary realities. Other pedagogical objectives are to facilitate an understanding of cultural perception: to develop a critical viewpoint of ethnocentrism in mainstream society; to introduce the current debate around minority representation, cultural appropriation, and post-colonial theory.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 382 Science, Technology and Women's Lives (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course explores both historical trends and contemporary concerns regarding women, science, and technology. It investigates: stereotypes of science and scientists; western science vs. native knowledge; science as a social activity and as a career choice for women; and the effects of science and technology on women's lives. NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 383 Lesbian Issues and Realities (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, 292, and nine credits from other WSDB or elective courses. This course introduces students to the field of lesbian studies and examines lesbian existence within a historical as well as a contemporary context. A central theme of the course is diversity among lesbians, not only in terms of race, class, ability but also in terms of political consciousness. NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 390 Women and Peace (3 credits) Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course covers a series of themes related to feminist peace politics such as violence, wars against women, militarism, roles played by women during wars, war mythologies, women in the military, the war industry and the new world order, feminist peace activism.

WSDB 391 Health Issues: Feminist **Perspectives** (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course examines women's health issues in both a historical and a contemporary light. Topics analysed range from the treatment of women within the health care system to the social constructs of illness and the diversity of healing practices.

WSDB 392 Féminismes dans la francophonie (3 crédits)

Préalable: 18 crédits, dont WSDB 290, 291, et 292, plus 9 autres crédits en WSDB ou cours électifs. A partir de textes théoriques et d'ouvrages traitant de la vie quotidienne, ce cours examine les similitudes, les analogies et les traits distinctifs des luttes des femmes durant les deux dernières décennies, ici et ailleurs dans la francophonie, notamment les luttes des Arabes, des Antillaises ou des femmes d'Afrique noire.

WSDB 398 Selected Topics in Women's Studies (3 credits)

WSDB 399 Selected Topics in Women's **Studies** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

WSDB 480 Feminist Thought II (3 credits) Prerequisite: 30 credits, which must include WSDB 380 and nine other WSDB credits. This course uses the critical approaches studied in Feminist Thought I to explore the changes that have taken place in women's expression and interpretation of modes of knowledge and theory. The course focuses on the relationship between oppressive systems and the ways different women's groups have resisted them. NOTE: Students who have received credit for WSDB 394 may not take this course for credit.

WSDB 490 Advanced Seminar in Women's Studies (3 credits)

Prerequisite: 30 credits, which must include WSDB 380 and nine other WSDB credits. This interdisciplinary seminar considers the effect of systems of gender, race, and class on women's place in society. It takes into account recent developments in feminist scholarship in the humanities and social sciences.

WSDB 491 Advanced Seminar in Women's Studies (3 credits)

Prerequisite: 30 credits, which must include WSDB 380 and nine other WSDB credits. This interdisciplinary seminar explores women's visions of the future and draws on historical and contemporary materials, both creative and scientific.

WSDB 496 Directed Research (6 credits) Prerequisite: Enrolment in the Specialization in Women's Studies; 30 credits, including WSDB 290, 291, 292, 380, 480, and permission of instructor. Students work with an individual faculty member in a particular area of Women's Studies. Students are expected to produce a substantial research project.

WSDB 498 Seminar in Women's Studies (3 credits)

WSDB 499 Seminar in Women's Studies (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

FACULTY OF COMMERCE AND ADMINISTRATION

61.10	COMMERCE AND ADMINISTRATION			
61.20	ADMISSION REQUIREMENTS			
61.21	UNDERGRADUATE DEGREE PROGRAMMES 61.21.1 The Bachelor of/Baccalaureate in Commerce 61.21.2 The Bachelor of/Baccalaureate in Administration			
61.22	The Credit Core 61.22.1 Academic Performance Regulations			
61.30	GENERAL INFORMATION			
61.35	FACULTY OF COMMERCE AND ADMINISTRATION COURSES			
61.40	ACCOUNTANCY			
61.50	DECISION SCIENCES AND MANAGEMENT INFORMATION SYSTEMS			
61.60	ECONOMICS			
61.70	FINANCE			
61.80	INTERNATIONAL BUSINESS			
61.90	MANAGEMENT			
61.100	MARKETING			
61.120	ADMINISTRATION			
61.140	PROGRAMME OPTIONS FOR NON-COMMERCE STUDENTS			
61.150	COMPUTER SCIENCE			
61.160	SPECIAL CERTIFICATE PROGRAMMES			
61.170	SPECIAL PROGRAMMES IN ACCOUNTANCY			

61.10 FACULTY OF COMMERCE AND ADMINISTRATION

Faculty

Dean MOHSEN ANVARI

Associate Deans DANIELLE MORIN, Academic and Student Affairs - Undergraduate Programmes

A. BAKR IBRAHIM, Administrative Affairs and Human Resources JERRY TOMBERLIN, External Affairs and Executive Programmes JEAN McGUIRE, Graduate Programmes,

Research and Programme Evaluation

Location

Sir George Williams Campus Annex GM, Room: 403 (514) 848-2779

Mission Statement

"The primary purpose of the Faculty of Commerce and Administration is to graduate employable students who are responsible community citizens. We acknowledge the centrality of our teaching mission and strive for excellence and innovation in our graduate and undergraduate programmes. We place strong emphasis on research and scholarship and aim to create an intellectual climate in which varied inquiry about the theory and practice of management can flourish.

As an urban business school we welcome our bilingual and multicultural constituency. We believe that an international faculty, diverse student body, strong links to the local business community along with academic relationships forged with international partners, provide a learning environment well suited to the demands of a globalizing and open economy.

We are recognized for a long tradition of offering accessible, flexible and relevant commerce and administration programmes to the Montréal community. The fundamental purpose of all our intellectual, scholarly and teaching endeavour is to equip our students with a range of essential competencies and values which help them achieve personal goals and make useful contribution to the communities in which they reside."

Approved by Faculty Council • March 1996

61.20 **ADMISSION REQUIREMENTS**

General admission requirements are listed in §13.

Cégep profile*:

Mathematics 201-103, 201-105 Economics 383-920, 383-921 Computer Literacy

Non-cégep profile*:

Non-cégep requirements Concordia Courses MATH 209 Calculus I Linear Algebra MATH 208 ECON 201, 203 Micro, Macro Economics Computer Literacy INTE 290/COMP 201

*NOTE: Equivalencies will be determined at the point of acceptance.

NOTE: Arrangements will be made in the first-year programme to allow any accepted student the opportunity to complete any of the required prerequisite courses.

Cégep Entrance — the 90-credit programme

The prerequisites for the 90-credit BComm or BAdmin degree are indicated in A) above. Students with a DEC will complete the 90-credit programme. Students who have a complete DEC but are lacking one or more of the prerequisite courses may take them within the 90-credit programme and those courses will count as elective credits.

Mature Entry — the 108-credit programme

In addition to the 90-credit programme, mature entry students must take 18 credits which include:

- credits in MATH 208, 209
- elective credits appropriate for the student's intended programme.

If necessary, the 12 credits may include courses from B) above excluding the MATH courses.

Four-Year Programme — the 120-credit programme

In addition to the 90-credit programme, students in the four-year programme will be required to complete the following 30 credits:

- 6 credits in MATH 208, 209
- 6 credits in an English composition course (e.g. ENGL 212, 213)
- 18 additional elective* credits.

*These elective credits must be selected from outside the offerings of the Faculty of Commerce and Administration, that is from the Faculties of Arts and Science, Engineering and Computer Science or Fine Arts. If necessary, the 18 credits may include the required courses from B) above, excluding the MATH courses.

NOTE: Because of the extensive use of computers in various programmes, students are advised to have access to a personal computer.

61.21 Undergraduate Degree Programmes

The Faculty of Commerce and Administration offers two distinct undergraduate programmes. The Bachelor of/Baccalaureate in Commerce (BComm) is a structured programme in which the student will select a Major from those offered in Commerce or Economics. The Bachelor of/Baccalaureate in Administration (BAdmin) is a flexible programme which permits the student to pursue interests outside the Faculty, and offers the possibility of complementing a fundamental grounding in Administration with Minor concentrations in an area of interest. Degree requirements listed below apply to all students entering the programme on or after June 1, 2000.

61.21.1 The Bachelor of/ Baccalaureate in Commerce This programme involves education in all aspects of business with emphasis on one particular area. The first year introduces students to operational skills, attitudes, and the necessary functional tools. The second year blends theory and practice to prepare students to analyse, formulate, evaluate, and resolve business challenges. The final year is a combination of the core, electives, and the student's Major.

Degree Requirements:

- 42 credits from the core
- 12 restricted elective credits outside the Faculty
- 24-27 credits to apply towards the Major
- 6-12 elective credits chosen by the student

NOTES:

- 1. All students are required to declare a Major.
- There are no Double Majors or Double Minors in the Faculty of Commerce and Administration. The Faculty may impose quotas on some Majors.
- A listing of the restricted elective credits is available in the Associate Dean's Office in the Guy Metro Building.

61.21.2 The Bachelor of/ Baccalaureate in Administration The aim of the BAdmin is to develop capable problem-solvers and decision-makers. The programme provides students with a fundamental grounding in administration and offers them the opportunity to pursue a wide range of interest amongst the various courses offered by the University.

Degree Requirements:

- 42 credits from the core
- 18 credits from within the Faculty of Commerce and Administration and/or its disciplines
- 30 elective credits chosen by the student, but outside the Faculty of Commerce and Administration, 15 of these must be beyond the introductory level.

NOTE: For both the BComm and the BAdmin, students may take up to a maximum of six credits in ESL courses.

61.22 The Credit Core

The Faculty of Commerce and Administration has revised its core effective September 1996 and its Majors and Minors effective June 1997. Students accepted into the Faculty of Commerce and Administration prior to these changes must adhere to the *Undergraduate Calendar* of the year of their acceptance into the programme. Students who wish to discuss any adjustments to their programme based on the new changes, may consult the academic adviser.

NOTE: Students are responsible for following the correct sequence of courses required for the completion of a particular programme.

The required 42-credit core is identical for both programmes and comprises the following courses:

1st Year 2nd Year Semester 1 Semester 1 COMM 210 Contemporary Business Thinking COMM 301 Management Information Systems COMM 212 Business Communication COMM 305 Managerial Accounting **COMM 215 Business Statistics** COMM 308 Introduction to Finance COMM 217 Financial Accounting Semester 2 Semester 2 COMM 310 Strategy and Competition COMM 220 Markets COMM 315 Business Law and Ethics COMM 222 Organizational Behaviour and Theory COMM 224 Marketing Management 3rd Year COMM 225 Production and Operations COMM 410 Entrepreneurship

FACULTY OF COMMERCE AND ADMINISTRATION

Management

Programme	Major	Minor	Certificate
Accountancy	Х		
Accountancy	^	V1	V1
Business Studies		X^1	X^1
Economics	Χ	Χ	
Entrepreneurship and Small Business Management		Χ	
Finance	Χ	Χ	
Financial Accountancy		Χ	
Human Resource Management	Χ	Χ	
International Business	Х	Χ	
Management	Χ	Χ	
Management Information Systems	Χ	Χ	
Managerial Accountancy		Χ	
Marketing	Χ	Χ	
Operations Management	Χ	Χ	

Students will indicate their preferred field of concentration at the time of application for entry. It should be noted that students may change their Major and/or Minor after completion of their first year of study.

¹This programme is not open to students registered in a programme leading to the undergraduate degree of Commerce or Administration.

Students may transfer into the Certificate programme up to 12 credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

61.22.1 Academic Performance Regulations

NOTE: The GPA regulations apply to all students, including those with Visiting status, registered in programmes offered by the Faculty of Commerce and Administration. This also includes the Minor in Business Studies and Certificate programmes.

The objectives of these regulations are:

- a) to ensure that the Faculty can certify that all of its graduates are qualified to enter their profession:
- b) to ensure that students can, with the assistance or intervention of the Faculty, assess themselves objectively, and plan programmes of study designed to meet their individual needs.

Annual Weighted Grade Point Average (WGPA)* Requirements and Consequences

*See §16.3.10, II for definition of Annual WGPA.

Acceptable standing requires that a student obtain an Annual WGPA of at least 2.00.

NOTE: Although a "C-" grade (1.70 grade points) is designated as Satisfactory in §16.3.3, a WGPA of 2.00 is required for acceptable standing.

Students in acceptable standing may proceed subject to the following condition: any failed required course must be repeated.

Conditional standing results when a student obtains an Annual WGPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments.

Students in conditional standing may not write supplemental examinations but may proceed subject to the following conditions:

- a) they must receive academic counselling from the appropriate member of the Dean's Office;
- b) they must repeat successfully all courses in which failing grades were obtained, or replace them by alternatives approved by the Dean's Office;
- c) in no case will the number of credits exceed 15 per term for full-time students and six per term for part-time students;
- d) they must obtain acceptable standing at the time of their next assessment.

Failed standing results when a student obtains an Annual WGPA of less than 1.50, or conditional standing in two consecutive periods of assessment.

Failed students may not write supplemental examinations.

Failed students are required to withdraw from their programme for a minimum period of one year. Students who are in failed standing for a second time will be dismissed from the University for a longer period of time. In subsequent years, should they wish to return to university studies, they must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

Failed students who are dismissed may apply for readmission through the Dean's Office of the Faculty to which they wish to be readmitted. If readmitted, they will be placed on academic probation and restricted to a maximum of six credits per semester. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.

Graduation Requirements

Students must satisfy all course requirements and be in acceptable standing.

The standings of potential graduates who have attempted less than 12 credits since their last assessment are determined on the basis that these credits constitute an extension of the last assessment period.

Students who fail to meet acceptable standing but meet conditional standing will have the following options:

- a) register for 12 credits and meet the criteria for acceptable standing;
- b) register for fewer than 12 credits. In this case, standing will be determined on the basis that these credits constitute an extension of the last assessment period.

In both cases a) and b), courses taken must be approved by the appropriate member of the Dean's Office. Normally, these courses will be selected from the offerings of the Faculty of Commerce and Administration or Department of Economics.

NOTE: Dean's Office is to be understood as being the appropriate member of the Dean's Office, normally the Associate Dean, Student Affairs, or delegate.

61.30 GENERAL INFORMATION

Failures/Prerequisites

Students are cautioned that a failure in a first-term course will prohibit them from proceeding to a second-term course for which the first is a prerequisite. Students who find themselves in this position must drop the second-term course and register in a section of the failed course, if available. There will be a course-change period at the beginning of each term, at which time students falling in the above category must make arrangements for the necessary course changes.

*Students who are registered for a course in which they do not have the appropriate prerequisite must adjust their registration accordingly. The Office of the Associate Dean reserves the right to deregister those students who do not adhere to academic regulations.

NOTE: THERE ARE NO SUPPLEMENTAL EXAMINATIONS IN THE FACULTY OF COMMERCE AND ADMINISTRATION.

Bilingualism

The business community, as well as governments, now express a preference for university graduates who are bilingual. We, therefore, advise all students to take advantage of the opportunities available during their years at this University to ensure that they are bilingual when they present themselves for employment upon graduation.

FACULTY OF COMMERCE AND ADMINISTRATION COURSES 61.35

The following core courses provide a format in which topics of faculty-wide interest are considered:

Courses

COMM 210 Contemporary Business Thinking (3 credits)

Prerequisite: COMM 212 previously or concurrently; ECON 201 or 203 or equivalent previously or concurrently. This course exposes students to an in-depth reading of several contemporary business books. It aims to incite students to develop a critical perspective on business literature. Students are also encouraged to explore popular and influential business writing; expose and evaluate the central ideas for scope, relevance, and managerial utility.

NOTE: It is recommended that part-time students complete this course, along with COMM 212, as early in their programme as possible.

COMM 212 Business Communication (3 credits)

Prerequisite: INTE 290 or COMP 201 previously or concurrently. This course focuses on the principles and techniques of clear, concise, and effective, written and oral communication, especially as they apply to business. The formal, grammatical, and stylistic elements of written and oral business communication are emphasized. In addition, students are instructed in and experience the use of audiovisual means of communication.

NOTE: It is recommended that part-time students complete this course, along with COMM 210, as early in their programme as possible.

NOTE: Students who have received credit for BUSC 300 may not take this course for credit.

COMM 215 Business Statistics (3 credits) Prerequisite: INTE 290 or COMP 201 previously or concurrently; MATH 208 or equivalent, MATH 209 or equivalent. This course introduces the fundamentals of statistics as applied to the various areas of business and administration. Topics covered include techniques of descriptive statistics, basic theory of probability and probability distributions, estimation and hypotheses testing, chi-square tests in contingency table analysis and for goodness-of-fit, and simple linear regression and correlation. NOTE: Students who have received credit for

COMM 217 Financial Accounting (3 credits)

Prerequisite: COMM 210 previously or concurrently. This course examines the theory and practice involved in measuring, reporting, and analysing an organisation's financial information. Concepts underlying financial statements are discussed, with an emphasis on

DESC 243 may not take this course for credit.

generally accepted accounting principles. Disclosures/requirements concerning financial statements as well as information needs of decision-makers are introduced. NOTE: Students who have received credit for ACCO 213 may not take this course for credit.

COMM 220 Markets (3 credits) Prerequisite: COMM 210 or MANA 266; COMM 215 or DESC 243; ECON 201 or equivalent; ECON 203 or equivalent previously or concurrently. This course provides a general perspective on the history, operation and interrelationships between Canadian and international product, labour and financial markets. Specifically, students will be introduced to issues of fundamental importance to today's managers and entrepreneurs such as changes in structure and competitiveness in these markets in response to government policies, the determination and behaviour of interest rates, inflation, market integration, and the role and function of financial intermediation. It further provides students with the knowledge of the role and impact of regulation and other government interventions in these markets.

Organizational Behaviour and **COMM 222** Theory (3 credits)

Prerequisite: COMM 210, 212. This course is designed to provide students with an opportunity to study individual behaviour in formal organizations. Through theoretical case and experiential approaches, the focus of instruction progressively moves through individual, group and organizational levels of analysis. Topics in the course include perception, learning, personality, motivation, leadership, group behaviour, and organizational goals and structure.

NOTE: Students who have received credit for MANA 340 may not take this course for credit.

COMM 224 Marketing Management (3 credits)

Prerequisite: COMM 210; COMM 212 previously or concurrently. This course is an introduction to the managerial concepts and practices of marketing from the perspective of an organization and its products and services. The process of developing a marketing strategy and all of the components thereof is examined along with their interrelationships. Readings and cases are used to help students apply these concepts to realistic marketing problems in a host of business settings, including small business and international environments. NOTE: Students who have received credit for MARK 213 or 350 may not take this course for

COMM 225 Production and Operations Management (3 credits)

Prerequisite: COMM 210, 212; COMM 215 previously or concurrently. This course is an introduction to contemporary operational issues and techniques in the manufacturing and service sectors. Among the topics covered are: operations strategy, forecasting, materials' management, total quality management, time-based competition, and minimal manufacturing. Mathematical modelling in resource allocation is also introduced. Cases and computer-aided quantitative tools for decision-making are used throughout the course with an emphasis on the interactions between production/operations management and other business disciplines.

NOTE: Students who have received credit for DESC 250 may not take this course for credit.

COMM 301 Management Information Systems (3 credits)

Prerequisite: COMM 217, 222, 224, 225. The objective of this course is to provide students with an understanding of the role of computer-based information systems in business organizations and the analytical skills required to work with management information systems. This course will also help to equip students with the ability to apply information technologies to a variety of business problems.

NOTE: Students who have received credit for DESC 222 may not take this course for credit.

COMM 305 Managerial Accounting (3 credits)

Prerequisite: COMM 217; COMM 222; COMM 225 previously or concurrently. This course covers the development of accounting information to assist management in carrying out its functions effectively and efficiently. Concepts and techniques for planning, performance evaluation, control, and decision-making are introduced. New developments are addressed with a focus on contemporary business issues and real-world applicability of management accounting concepts and techniques.

NOTE: Students who have received credit for ACCO 218 may not take this course for credit.

COMM 308 Introduction to Finance (3 credits)

Prerequisite: COMM 217, 220. This course provides a general understanding of the fundamental concepts of finance theory as they apply to the firm's long-run short-run financing and investment decisions. Building on the objective of firm value maximization, students will become familiar with the conceptual issues underlying risk and return relationships and their measurements, as well as the valuation of financial securities. They will also learn the concept of cost of capital, its measurement, and the techniques of capital budgeting as practised by today's managers. Students will be introduced to the basic issues surrounding the firm's shortand long-term funding decisions and its ability to

pay dividends. Management of the firm's accounts receivable and accounts payable, and the level of working capital are also presented.

NOTE: Students who have received credit for FINA 214 or 315 may not take this course for credit.

COMM 310 Strategy and Competition (3 credits)

Prerequisite: COMM 210, 301, 305, 308. This course introduces the concepts of strategic management and competitive analysis. Emphasis is given to integrating concepts and ideas from the major functional areas such as marketing and finance to give a global perspective on decision-making and directing modern business enterprises. Lecture topics and case studies are selected to portray the nature of the strategic process and the dynamics of competition in a variety of contexts. Attention is also given to the issues of social responsibility, ethics, and personal values. In this context, we also examine the connection between organizational strategy and the physical environment. Finally, cases and assignments which require an analysis of organizational improvement strategies and new organizational structures are selected. NOTE: Students who have received credit for MANA 460 may not take this course for credit.

COMM 315 Business Law and Ethics (3 credits)

Prerequisite: COMM 308. This course will allow students to develop a degree of familiarity with the important ethical and legal aspects of business and to become more aware of and comfortable with resolving ethical and legal components of their decision-making and with distinguishing right from wrong business behaviour. NOTE: Students who have received credit for MANA 475 may not take this course for credit.

COMM 410 Entrepreneurship (3 credits) Prerequisite: COMM 310. This capstone course requires graduating students to demonstrate their ability to integrate the knowledge and skills they have acquired during their Commerce programme. Course emphasis will be on the entrepreneurial aspects of management that are required to create, develop, and sustain either a new business venture or a major project/initiative within an existing organization. The integrative nature of the course will require an understanding of each functional area of business. Students will have the opportunity to demonstrate the teamwork, leadership, communication, and the other skills stressed throughout the programme.

COMM 499 Seminar Course (3 credits)
Prerequisite: To be determined each academic term. This course will enable students, on an individual basis, to further focus on a specialized topic within their discipline.

ACCOUNTANCY

Faculty

Associate Professor and Chair of the Department

GEORGE K. KANAAN

Professors

C. DEREK ACLAND MOHAMED E. IBRAHIM ROBERT ALLAN LONG

Professor Emeritus LAWRENCE BESSNER

Associate Professors IBRAHIM M. ALY HENRY J. DAUDERIS CHARLES DRAIMIN KELLY F. GHEYARA MANMOHAN RAI KAPOOR JUAN J. SEGOVIA Assistant Professors
EMILIO BOULIANNE
FREDERICK DUNCAN
MAJIDUL ISLAM
BURYUNG LEE
GEORGE LOWENFELD
MAUREEN STERLING
HUSSEIN WARSAME

Lecturers
PATRICK DELANEY
GAIL FAYERMAN
ELEANOR MOSS-WERBIN
STAN MROZ
TARA RAMSARAN
SANDRA M. ROBINSON
WENDY NADINE ROSCOE

Location

Sir George Williams Campus Annex GM, Room: 600-13 (514) 848-2759

Department Objectives

The Department of Accountancy is dedicated to providing leadership in accounting education through a strong commitment to excellence in teaching and leadership in the discovery and dissemination of accounting knowledge. It acts as a bridge between the University and business, government, and professional accounting as they relate to various facets of accountancy at the undergraduate and graduate levels.

The Department continuously strives to provide leadership and scholarship that are recognized provincially, nationally, and internationally by offering unique, creative, innovative, and "lifetime-learning" opportunities. The Department is responsive to its diverse constituencies and both nourishes and preserves an equitable, just, and non-discriminatory environment.

Programmes

27 Major in Accountancy

- 3 ACCO 310
- 3 ACCO 320
- 3 ACCO 330
- 3 ACCO 340
- 3 ACCO 400
- 12 additional credits offered by the Department

12 Minor in Financial Accountancy

- 3 ACCO 310
- 3 ACCO 320
- 6 additional credits offered by the Department

12 Minor in Managerial Accountancy

- 3 ACCO 330
- 3 ACCO 430
- 6 additional credits offered by the Department

Accountancy Co-operative Programme

Director SANDRA M. ROBINSON, Lecturer (514) 848-2748

The Accountancy Co-operative programme is offered to students who are enrolled in the BComm programme and are majoring in Accountancy. Students interested in applying for the Accountancy co-op should refer to §24 where a full description of the admission requirements is provided. Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms.

Courses

ACCO 220 Financial and Managerial Accounting (3 credits)

This course provides an introduction to accounting principles underlying the preparation of financial reports with an emphasis on the relationship between accounting information and production decisions. It examines the relationship between costs, production volume, and profit, as well as the practical benefits of standard costs for planning and control purposes. The role of accounting information in various manufacturing decisions is also highlighted.

NOTE: This course would be useful to Engineering students.

NOTE: Commerce and Administration students may not take this course for credit.

NOTE: Students who have received credit for ACCO 213, 218, 230, 240 may not take this course for credit.

ACCO 230 Introduction to Financial Accounting (3 credits)

This course provides an introduction to accounting concepts underlying financial statements of organizations. It focuses on the analysis, measurement, and reporting of business transactions to users of financial statements. It also examines the uses and limitations of accounting information for investment and credit decisions.

NOTE: Commerce and Administration students may not take this course for credit.

NOTE: Students who receive a grade of "C" or better may be exempt from COMM 217.

NOTE: Students who have received credit for ACCO 213 or 220 may not take this course for credit.

ACCO 240 Introduction to Managerial Accounting (3 credits)

Prerequisite: ACCO 213 or 230. This course examines the role of accounting information for decision making, and focuses on concepts and techniques used in planning operations, controlling activities, and evaluating managerial performance. New developments are addressed with a focus on contemporary business issues and real-world applicability of management accounting concepts and techniques.

NOTE: Commerce and Administration students may not take this course for credit.

NOTE: Students who receive a passing grade may be exempt from COMM 305.

NOTE: Students who have received credit for ACCO 218 or 220 may not take this course for credit.

ACCO 310 Intermediate Accounting I (3 credits)

Prerequisite: ACCO 213 or COMM 217. This course extends the material covered in the first financial accounting course, integrating the previous work with more advanced accounting theory and application. Intensive study is made of the theory and practice of external financial reporting by business entities, focusing on concepts and procedures underlying the measurement of

assets and the determination of income.

NOTE: Students who have received credit for
ACCO 323 may not take this course for credit.

ACCO 320 Intermediate Accounting II (3 credits)

Prerequisite: ACCO 310 or 323. This course continues the intensive study of ACCO 310, with particular emphasis on accounting for liabilities, shareholders' equity, and other related topics such as earnings per share, pension accounting, and accounting for income taxes. NOTE: Students who have received credit for ACCO 326 may not take this course for credit.

ACCO 330 Cost and Management Accounting (3 credits)

Prerequisite: ACCO 218 or COMM 305. This course provides an examination of the techniques, systems, and procedures applicable to the managerial use of accounting information for planning, decision-making, and control. Topics include cost accumulation and allocation, product and process costing, flexible budgeting and variance analysis, evaluation of managerial performance, and transfer pricing.

NOTE: Students who have received credit for

NOTE: Students who have received credit for ACCO 303 may not take this course for credit.

ACCO 340 Income Taxation in Canada (3 credits)

Prerequisite: ACCO 213 or COMM 217. This course examines the federal income tax structure, including the taxation of employment, business, property income, and capital gains of individuals and corporations.

NOTE: Students who have received credit for ACCO 441 may not take this course for credit.

ACCO 345 Managerial Tax Planning (3 credits)

Prerequisite: ACCO 213 or COMM 217. This course develops an understanding of the role of taxes in business decision processes. It presents a conceptual framework that integrates tax and nontax business issues without resorting to the technical details of the Income Tax Act. The emphasis is on applying key concepts to all planning issues, whether they are personal or corporate, domestic or international. The topics covered include multi-period tax planning, implicit taxes and market equilibrium, tax arbitrage, and international tax planning.

NOTE: Students in the Accountancy Major may not take this course for credit.

NOTE: This course would be useful for students in Finance and Management.

ACCO 350 Accounting Information Systems (3 credits)

Prerequisite: DESC 222 or COMM 301; ACCO 218 or COMM 305; ACCO 310 or 323. This course examines the role and function of computerized accounting information systems in recording, processing, and storing accounting data necessary for planning, decision-making, and control of organizations. Theory and practice are combined in a case-study approach which includes "hands-on" experience with computer software.

NOTE: Students who have received credit for ACCO 414 may not take this course for credit. NOTE: This course would be useful for students in Management Information Systems.

ACCO 355 Analysis of Financial Statements (3 credits)

Prerequisite: ACCO 218 or COMM 305; FINA 214 or COMM 308. This course explores the usefulness and limitations of financial statements for investment and credit decisions. It focuses on the interpretation of the information contained in financial statements which reflect the economic characteristics of the firm and its strategic business decisions. Instruments and techniques for financial statement analysis are discussed and applied to case studies and actual companies.

NOTE: Students in the Accountancy Major may not take this course for credit.

NOTE: This course would be useful for students in Finance and Management.

ACCO 400 Accounting Theory (3 credits)
Prerequisite: ACCO 320 or 326. This course
examines the theoretical foundations of the
contemporary approach to financial reporting,
and the political and pragmatic considerations in
the development of the conceptual framework
underlying current accounting standards.
Alternative theories of accounting are discussed
and controversial areas are emphasized.
NOTE: Students who have received credit for
ACCO 461 may not take this course for credit.

ACCO 410 Governmental and Not-for-Profit Accounting (3 credits)

Prerequisite: ACCO 320 or 326. This course introduces the theory and concepts that underlie the financial accounting, control, and reporting in not-for-profit organizations. General concepts and principles will be illustrated by comparing the practices of selected not-for-profit organizations, including local and federal governments and universities, with authoritative standards.

ACCO 420 Advanced Financial Accounting (3 credits)

Prerequisite: ACCO 320 or 326. This course examines the theory and practice of accounting for intercorporate investments, business combinations, consolidation of financial statements, disaggregated information, and foreign currency transactions and operations. The course also examines accounting for partnerships.

NOTE: Students who have received credit for ACCO 335 may not take this course for credit.

ACCO 430 Advanced Management Accounting (3 credits)

Prerequisite: ACCO 303 or 330. This course

expands on the problem-solving and decisionmaking tools covered in ACCO 330, and develops the student's ability to select and apply appropriate managerial accounting techniques to cases involving actual companies. This integrative course emphasizes the development of analytical skills needed to solve managerial problems, and covers recent developments in management accounting.

NOTE: Students who have received credit for ACCO 422 may not take this course for credit.

ACCO 440 Advanced Taxation (3 credits)
Prerequisite: ACCO 340 or 441. This course
extends the coverage of ACCO 340 with an
examination of specialized topics in personal
and corporate income tax, including a detailed
review of the taxation of corporations, tax
planning, and the tax effects of various
theoretical and practical business combinations.
NOTE: Students who have received credit for
ACCO 442 may not take this course for credit.

ACCO 450 Financial Auditing (3 credits)
Prerequisite: ACCO 320 or 326 previously or
concurrently. This course examines auditing
concepts and methodology underlying audits of
financial statements in terms of current practice
and standards. It emphasizes the audit process
and the role of the public accountant in expressing an opinion on the financial statements of
an organization.

NOTE: Students who have received credit for ACCO 429 or 432 may not take this course for credit.

ACCO 460 Operational Auditing (3 credits)
Prerequisite: ACCO 320 or 326 previously or
concurrently. This course examines the concepts
and techniques of operational auditing. It
emphasizes the audit of operations within the
organization. Topics include comprehensive
auditing, management control and systems
development, computer-based auditing techniques, documentation and communication of
audit findings.

ACCO 470 Special Topics in Accounting (3 credits)

Prerequisite: Written permission of the Department. This course is intended to complement accounting courses taken previously or concurrently at the senior level. It provides an opportunity for more intensive study in one or more specific topics in accounting.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

ACCO 480 Financial Reporting and Analysis (3 credits)

Prerequisite: ACCO 335 or 420. This course integrates the material covered in prior financial accounting courses. It emphasizes a user perspective of financial reporting, and focuses on the interpretation and analysis of information

contained in financial statements and related disclosures. It provides an understanding of the usefulness and limitations of financial accounting information for investment and credit decisions. Models and techniques used in financial statement analysis are applied to case studies and actual companies.

ACCO 490 Seminar in Taxation (3 credits) Prerequisite: ACCO 440 or 442. This course provides an in-depth coverage of taxation issues. It emphasizes the development of professional skills in the application of tax principles and concepts to the solution of complex tax problems facing individuals, trusts, and corporations.

NOTE: Students who have received credit for ACCO 471A may not take this course for credit.

DECISION SCIENCES AND MANAGEMENT INFORMATION SYSTEMS

Faculty

Associate Professor and Chair of the Department JAMSHID ETEZADI-AMOLI

Professors
SURESH KUMAR GOYAL
GREGORY E. KERSTEN
TAK KWAN MAK
AHMET SATIR

Associate Professors CLARENCE BAYNE JEAN-MARIE BOURJOLLY MERAL BÜYÜKKURT DALE DOREEN MOHAN GOPALAKRISHNAN

DENNIS KIRA

DANIELLE MORIN FASSIL NEBEBE MAHESH SHARMA JERRY TOMBERLIN

Assistant Professors EL SAYED ABOU-ZEID ANNE-MARIE CROTEAU RAAFAT SAADE AHMAD SHAFAAT

Lecturers BORIS BARAN GERALDINE KORDA KEVIN LAFRAMBOISE ARMAND ST. PIERRE

Location

Sir George Williams Campus Annex GM, Room: 209-9 (514) 848-2980

Department Objectives

The Department of Decision Sciences and Management Information Systems strives to equip its students with an integrated set of decision-making skills.

The Decision Sciences Major aims to develop expertise in all important aspects of managerial statistics, operations research, and production/operations management. It prepares graduates for careers that require skills in the collection and analysis of relevant data for decision-making with respect to the effective and efficient management of human resources, capital and time. The Management Information Systems Major aims to develop expertise in all important aspects of the development, use, and management of information systems. It prepares graduates for careers in information systems analysis and design, database design and administration, as well as management of information technology.

Programmes

- 24 Major in Operations Management
- 15 DESC 325, 335, 361, 378, 425
 - 9 Chosen from DESC 375*, 385, 390*, 445*, 477*, 481, 490*, 492* *Not all courses will be offered in each academic year.
- 12 Minor in Operations Management
- 12 Chosen from DESC 325, 335, 361, 378, 425
- 24 Major in Management Information Systems
- 15 DESC 382, 384, 481, 482, 484
- 3 COMP 248
- Chosen from DESC 381, 385, 386;
 COMP 238, 249
- 12 Minor in Management Information Systems
- 12 DESC 382, 481, 482, 484

Decision Sciences and Management Information Systems Co-operative Programme Director MERAL BÜYÜKKURT, Associate Professor (514) 848-2741

The Decision Sciences and Management Information Systems co-operative programme is offered to students who are enrolled in the BComm programme and are majoring in Management Information Systems. Students interested in applying for the Management Information Systems co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Commerce and Administration and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Management Information Systems co-op committee, which includes the student's advisers. Please refer to \$24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

DESC 325 Operational/Tactical Issues in Operations Management

(3 credits)

Prerequisite: COMM 225. Operations management issues and problems with short-medium term implication will be studied in this course. Among the topics covered are: production planning and control, scheduling, materials handling, warehousing, purchasing, and inventory management. Both modelling and managerial aspects will be dealt with. Manufacturing analysis and enterprise resources planning software will be used to demonstrate the integration of the topics covered and their practical applications.

NOTE: Students who have received credit for DESC 350 or MANA 345 may not take this course for credit.

DESC 335 Quality Management (3 credits) Prerequisite: COMM 215 or DESC 244; COMM 225 or DESC 250. Operational issues in managing quality in manufacturing and service operations will be dealt with. The main focus of the course is on the technical issues in quality management aimed at developing hands-on knowledge. Topics such as Quality Management Philosophies, Total Quality Management, Process Management and Continuous Improvement, Quality Management Evaluation and Assessment (including ISO certification), Quality Assurance and Control (including Statistical Process Control, Reliability) will be covered. Software packages will be used for analysing problems with real-life data.

DESC 361 Management Science Models for Operations Management (3 credits)

Prerequisite: COMM 225 or DESC 250. This course deals with application of optimization models (such as linear programming, network models, integer programming, quadratic programming, and waiting line models) for various operations management scenarios dealing with human, physical, and financial resources planning.

The course focuses on mathematical modelling issues and interpretation of solution through the use of optimization software packages. NOTE A/See §200.2

DESC 375 Survey Design and Analysis (3 credits)

Prerequisite: COMM 215 or DESC 244. This course deals with the design and execution of surveys and treatment of data consisting of measurements of several variables. Topics include development of research problems, sample design, survey data analysis, and elementary multivariate techniques. Students are required to carry out a project individually or in small groups. Substantial use is made of statistical software on mainframe and/or microcomputers. NOTE A/See §200.2

DESC 378 Statistical Models for Business Research (3 credits)

Prerequisite: COMM 215 or DESC 244. This course is intended to give the student a foundation in data analysis using linear models, with emphasis on applications in business, administration, and economics. Topics include regression modelling with several variables; one- and two-factor analysis of variance; time series analysis and forecasting. The course is applied in nature with a focus on real-life data analysis using statistical software packages. NOTE A/See §200.2

DESC 381 Introduction to Business Computer Programming

(3 credits)

Prerequisite: COMM 301 or DESC 222. The objective of this course is to provide students with the skills needed to develop computerbased applications. To this end, students will first learn fundamental software development techniques that will enable them to solve business information-processing problems, using both procedural and non-procedural approaches. They will then apply these concepts and techniques by developing business applications in a contemporary programming language such as Visual Basic. NOTE A/See §200.2

DESC 382 Database Management (3 credits)

Prerequisite: COMM 301 or DESC 222. This course introduces students to the management of data in a corporate environment. Topics include data management, elementary data modelling, physical structures for representing business data, file organization, data dictionaries, file design, database administration, and issues in documentation. Use is made where feasible of professional data management software to illustrate course concepts. NOTE A/See §200.2

DESC 384 Business Data Communications (3 credits)

Prerequisite: COMM 301; COMP 248. This course will provide a comprehensive introduction to the principles and techniques of business data communications. The content is directed towards the business student who desires a technical overview of the concepts of data transmission and methodologies employed in designing and managing local area and regional communications networks.

NOTE: Students who have received credit for DESC 486 may not take this course for credit.

DESC 385 Decision Support Systems (3 credits)

Prerequisite: COMM 301 or DESC 222. New developments in information technology such as data bases, fourth-generation languages, and artificial intelligence have changed the nature of traditional business decision support systems (DSS). This course starts by examining the human decision-making process and categorizes decision tasks. It then evaluates the requirements for effective user-machine decision making. The impact of the new end-user computing tools is considered in relation to DSS design. NOTE: Students who have received credit for DESC 493 may not take this course for credit.

DESC 386 Management of Information Systems (3 credits)

Prerequisite: COMM 301 or DESC 222. (Computer Science students may take this course without the stipulated prerequisites, but with the permission of the DS & MIS Department.) This course explores various topics related to the management of information resources and services in the organization. First, the basic principles of information systems management are introduced. Topics include planning, control, development, and operations of information technology. Through the examination of several case studies, students are given the opportunity to acquire the necessary skills to identify, analyse, and communicate different issues surrounding these topics.

NOTE: Students who have received credit for DESC 483 may not take this course for credit.

DESC 390 Production/Manufacturing Management (3 credits)

Prerequisite: COMM 225 or DESC 250. It is the production function of the enterprise that gives us the products and services that we sell. In this course, we attempt to help management guide and control this area. Topics include government programmes and incentives, health and safety regulations, material handling, plant location and layout, and production incentive systems. NOTE: Students who have received credit for MANA 345 may not take this course for credit.

Strategic Issues in Operations **DESC 425** Management (3 credits)

Prerequisite: DESC 325 or 350. Issues related to product/service and process strategies, management of technology, capacities management, facilities planning, and cycle time management will be dealt with. Also, issues in contemporary operations management such as minimalistic manufacturing, activity/target-based costing, synchronous manufacturing and business process-re-engineering will be covered. The focus and examples would be both on service, as well as on manufacturing operations.

DESC 445 Statistical Software for **Decision Making** (3 credits)

Prerequisite: DESC 378. This course presents a thorough introduction to widely used statistical

software systems for data management (information storage and retrieval), data modification and programming, file handling, and procedures for statistical analysis and reporting. It also covers current software on mainframe and/or microcomputers, and covers special features such as graphics and macro languages. The course will be offered in computer labs and will expose the students to the use of the software on different platforms and different operating systems.

DESC 477 Managerial Forecasting (3 credits)

Prerequisite: DESC 378 or equivalent. This course presents the foundations of applied time-series analysis for managerial forecasting. It includes forecasting methods and objectives, fundamental concepts in time-series analysis, models for seasonal time-series, models for nonstationary time-series, Box and Jenkins methods, forecast evaluation. This is an applied course with a heavy emphasis on actual data analysis using statistical computer packages on mainframe and/or microcomputers. NOTE A/See §200.2

DESC 481 Information Systems Analysis (3 credits)

Prerequisite: COMM 301 or DESC 222. This course covers the first phase of the systems development life cycle, which culminates in the systems proposal. Topics include the preliminary survey, analysis of existing systems and identification of deficiencies, the development of functional specifications, feasibility and cost/benefit analysis and development of a recommended course of action. In addition, various diagramming techniques are examined. NOTE A/See §200.2

DESC 482 Information Systems Design (3 credits)

Prerequisite: DESC 382, 481. Methods and procedures for designing business information systems are discussed. Topics include data and process modelling, preparing screen and report layouts using data dictionaries and documentation within the design process. A comprehensive case study using current computer-aided technologies demonstrates various design concepts.

NOTE A/See §200.2

NOTE: To ensure proper succession in the thought process, students are strongly recommended to enrol in this course in the term immediately following the successful completion of DESC 481.

DESC 484 Software Application Development (3 credits)

Prerequisite: DESC 482. Students will implement the applications they have analysed and designed in DESC 481 and 482. New development tools and languages will be employed in this implementation effort.

NOTE: Students who have received credit for DESC 383 may not take this course for credit.

DESC 487 Object-Oriented System Development (3 credits)

Prerequisite: DESC 481; COMP 248. This course is an introduction to the concepts, techniques, and methodologies of the Object-Oriented (OO) approach to information system development. Fundamental concepts of objects models will be followed by a study of various OO methods for system analysis and design. Finally, a comparative survey of several contemporary OO implementation technologies such as object languages, object databases, and distributed object architecture will be presented. Students will then use one of these methodologies to develop a small-scale business system.

DESC 490 Special Topics in Decision Sciences and Management Information Systems (3 credits)

Prerequisite: Permission of the Department.
This course allows for more intensive examination

of one or more topics in production/operations management, operations research, business statistics or management information systems.

Prerequisite: COMM 215 or DESC 244;
COMM 225 or DESC 250. This course is intended to give an insight into using simulation technique for building realistic models of complex systems, and how to use these models to experiment with alternative system designs. Application areas will include manufacturing and production systems, transportation systems, health-care systems, government/public systems, and financial systems. A simulation language will be taught and application of animation will also be dealt with. NOTE A/See §200.2

ECONOMICS

Location

Loyola Campus Centennial Building, 3rd Floor Sir George Williams Campus Annex GM, Room: 302-7 (514) 848-3900

Programmes

For departmental information please see §31.080.

24 Major in Economics

- 12 ECON 301, 302, 303, 304
- 12 ECON elective credits chosen at the 400 level
- 12 Minor in Economics
- 6 ECON 318, 319
- 6 ECON elective credits chosen at the 300 level

FINANCE

Faculty

Professor and Chair of the Department LORNE SWITZER

Professors MOHSEN ANVARI LAWRENCE KRYZANOWSKI

Associate Professors
ABRAHAM BRODT
RICHARD CHUNG
ALAN HOCHSTEIN
ARVIND JAIN
GREGORY LYPNY
LATHA SHANKER
DOGAN TIRTIROGLU

Assistant Professors SANDRA BETTON HARJEET BHABRA ANDREY PAVLOV KHALED SOUFANI

Lecturers
ARSHAD AHMAD
EMMANUEL HAVEN
DEREK HIRSCH
JAY MANNADIAR
IAN RAKITA
KESHAB SHRESTHA

Location

Sir George Williams Campus Annex GM, Room: 503-55 (514) 848-2789

Department Objectives

The Department of Finance is committed to excellence in both research and teaching and has earned a solid reputation as a productive and research oriented academic unit. The Department's research activities include theoretical, empirical, and applied contributions — all aimed at furthering knowledge in the field. Its teaching activities cover a wide range of topics including corporate finance, investment, international finance, personal finance, optimization techniques, portfolio management, options and futures and fluctuations in security prices, exchange rates, and interest rates. Teaching effectiveness represents the cornerstone of the Department's teaching objectives. The Department's curriculum is a dynamic one which keeps up with current trends and innovations in the financial area. Department members have been recognized not only with Faculty Teaching Awards but also internationally by winning the 3M Teaching Fellowship Award.

The Department has developed orientation and training programmes with major corporations and financial institutions for its students. Through this type of external involvement, classroom teaching is effectively blended with the complexities of the real world thereby providing students not only with a more meaningful education but also with job opportunities.

Programmes

- 24 Major in Finance
- 3 FINA 380
- 3 FINA 390
- 18 additional 400-level credits offered by the Department
- 12 Minor in Finance
- 3 FINA 380
- 3 FINA 390
- additional 400-level credits offered by the Department

Finance Co-operative Programme

Director ARSHAD AHMAD, Lecturer (514) 848-2928

The Finance Co-operative programme is offered to students who are enrolled in the BComm programme and are majoring in Finance. Students interested in applying for the Finance co-op should refer to §24 where a full description of the admission requirements is provided. Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms. Students will be under personal supervision and must meet the requirements specified by both the Faculty of Commerce and Administration and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Courses

FINA 320 Personal Financial
Management (3 credits)
Prerequisite: COMM 308 or FINA 315. This

course is designed to assist the student in making rational decisions when consulting in personal financial activities. Topics covered include personal budgeting, spending pattern analysis, the proper use of credit, housing, investment (both traditional and modern), tax and retirement planning. Case studies are utilized when possible.

NOTE: Finance Majors and Minors may not take this course for credit towards their Major or Minor.

NOTE: Students who have received credit for FINA 424 may not take this course for credit.

FINA 330 Applied Financial Management (3 credits)

Prerequisite: COMM 308 or FINA 315. The intent of this course is to develop skill in the identification and structuring of financial problems, in the selection of appropriate analytical techniques for their solution, and in the application of such techniques to decision-making in actual business situations. A variety of cases are used to achieve these objectives.

NOTE A/See §200.2

NOTE: Finance Majors and Minors may not take this course for credit towards their Major or Minor. NOTE: Students who have received credit for FINA 430 may not take this course for credit.

FINA 350 Introduction to Real Estate (3 credits)

Prerequisite: COMM 308 or FINA 315. This course deals with the central issues in real estate finance and investment. Topics in property management and real estate development which are covered include the organization of real estate markets, pricing, inflation, taxation, valuation methods, brokerage, ownership forms, and real estate law.

NOTE: Finance Majors and Minors may not take this course for credit towards their Major or Minor. NOTE: Students who have received credit for FINA 491 may not take this course for credit.

FINA 370 (also listed as IBUS 370) International Financial Management (3 credits)

Prerequisite: COMM 308 or FINA 315. This course is designed for students to acquire and demonstrate knowledge of the fundamental principles and issues in international financial management. It covers such topics as foreign exchange markets, exchange rate behaviour, structure and meaning of the international balance of payments, the functioning of fixed and floating exchange rate systems, short- and long-term investment and borrowing decisions, eurocurrency markets, foreign exchange risk management, and capital budgeting decisions for overseas investment. In sum, the topics are covered from the perspective of an individual who wishes to know how the international financial environment will affect the firm. NOTE: Finance Majors and Minors may not take this course for credit toward their Major or Minor. NOTE: Students who have received credit for FINA 467 or IBUS 370 or 469 may not take this course for credit.

FINA 380 Theory of Finance (3 credits)
Prerequisite: COMM 308 or FINA 315. This
course provides a theoretical foundation upon
which subsequent 400-level courses can be
built. The course investigates the perfect capital
markets paradigm in the context of how asset
prices are related; how price relationships are
grounded in utility theory; how formal asset
pricing and related models, such as the Capital
Asset Pricing Model, Arbitrage Pricing Theory,
Option Pricing Model and the Miller-Modigliani
Propositions, are implications of the paradigm;
and how price relationships are changed in
imperfect markets.

NOTE: Students who have received credit for FINA 440 may not take this course for credit.

FINA 390 Theory of Capital Markets (3 credits)

Prerequisite: COMM 308 or FINA 315; FINA 380 or 440 previously or concurrently. This course extends the concepts covered in FINA 380 to a consideration of the way in which domestic and international capital markets operate. The course will survey the reasons why different markets have different institutional characteristics; how various markets are used by investors and financial managers; how prices in these markets behave; and what the implications of the functioning of various markets are for financial decision makers. NOTE A/See §200.2 NOTE: Students who have received credit for FINA 460 may not take this course for credit.

FINA 400 Theory of Corporate Finance (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course focuses on the application of the modern theory of finance to corporate decisions. Building upon the material covered in FINA 380 and 390, it examines the firm's investment and financial decisions under various economic and capital market conditions. More specifically, topics covered include cost of capital, capital structure decisions, evaluation and the application of the recently developed financial innovations in the debt market (e.g., swaps and junk bonds), mergers and acquisitions and leveraged buyout decisions, and dividend and equity management strategies. NOTE A/See §200.2

NOTE: Students who have received credit for FINA 441 may not take this course for credit.

FINA 401 Capital Budgeting (3 credits)
Prerequisite: FINA 380 or 440; FINA 390 or 460.
This course provides an in-depth coverage of analytical techniques for rational capital investment decisions by corporations. Emphasis is placed on the assessment of investment choices within the overall strategic framework of the firm, and on the practical as well as the theoretical aspects of the decision process.

NOTE A/See §200.2

NOTE: Students who have received credit for FINA 417 may not take this course for credit.

FINA 402 Short-Term Financial Management (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course is concerned with the key aspects of short-term financial management. It begins with a brief coverage of the institutional environment facing the financial manager in Canada. A detailed coverage of sources for short-term borrowing and investments is presented. The structure of the Canadian financial system along with a description of the various methods of effecting payments as well as the clearing and settlement system are covered. Topics in overall liquidity management are briefly reviewed from a theoretical perspective. Traditional subjects in cash management, i.e., collections, disbursement and control, forecasting, company bank relationship, and shortterm investment and borrowing are examined next. Such new developments as electronic data interchange and EFT/POS are also examined. The course also provides a coverage of trade credit both from a theoretical positive standpoint and normative viewpoint.

NOTE: Students who have received credit for FINA 420 may not take this course for credit.

Investment Analysis (3 credits) Prerequisite: FINA 380 or 440: FINA 390 or 460. This course is devoted to an examination of the investment decision, both from the viewpoint of the individual investor and the institutional investor. Valuation of different financial instruments such as treasury bills, bonds, common stocks, preferred stocks, options, warrants, convertibles, rights, futures both commodity and financial, mutual funds and pension funds, and the use of different instruments in various investment strategies such as investment, speculation, hedging, and arbitrage are examined. Techniques examined by analysts to pick investments such as fundamental analysis, technical analysis, and quantitative analysis are studied.

NOTE A/See §200.2

NOTE: Students who have received credit for FINA 452 may not take this course for credit.

FINA 411 Portfolio Management (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course focuses on modern investment theory and its application to the management of entire portfolios. Topics include: a) construction of optimal asset portfolios using techniques such as the single index model, b) extensions of the capital asset pricing model theory and tests example, the zero-beta model, c) criteria for evaluation of investment performance, d) active vs. passive portfolio management, e) portfolio insurance, f) market efficiency. A computer exercise is assigned to illustrate the application of the theory. NOTE A/See §200.2

FINA 453 may not take this course for credit.

FINA 412 Options and Futures (3 credits)
Prerequisite: FINA 380 or 440; FINA 390 or
460. This course on options and futures is a
comprehensive analysis of the options and
futures markets in North America. The student
is introduced to the different markets for these
instruments and their institutional details. The
different types of options and futures currently
trading are examined. The principles of valuation
of futures and options, their use in risk management through hedging techniques and their use
in speculative strategies are studied. Emphasis
is placed on the analysis of financial options
and futures.

NOTE: Students who have received credit for FINA 419 may not take this course for credit.

FINA 450 Real Estate Investment and Finance (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course deals with both the central issues in real estate finance and investment and with recent advances in the field. Students will be introduced to basic topics such as the organization of real estate markets, pricing, inflation, taxation, valuation methods, brokerage, ownership forms, and real estate law. In addition, they will study recent advances in finance as they apply to the concept of real estate valuation. Principles learned in FINA 380 and 390 and academic journals will serve as the basis for this aspect of the course. NOTE: This course is offered for Finance Majors and Minors only. Non-Finance Majors and Minors must register for FINA 350. NOTE: Students who have received credit for FINA 350 or 491 may not take this course for credit.

FINA 455 Seminar in Finance (3 credits)

This course is intended primarily for Finance Majors and Minors. It provides an opportunity for more intensive study in one or more specific topics of finance. The topic varies according to the special interests of the professor and the students. Enrolment is restricted and is subject to departmental approval. Students repeating FINA 455 register for credits under FINA 456. NOTE A/See §200.2

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

FINA 470 International Finance (3 credits) Prerequisite: FINA 380 or 440; FINA 390 or 460. This course examines the fundamental principles and issues in international finance. After examining the recent global evolution of the international financial environment, the institutional characteristics of foreign exchange and Eurocurrency markets will be studied. In addition, in-depth coverage of various issues relating to forecasting exchange rates, capital movements, and the international structure of interest rates is provided. Several mechanisms for managing international exchange and

financial risk will be assessed, including forwards, options, and futures on currencies as well as on interest rates. The course will conclude with a survey of recent international asset pricing models.

NOTE: This course is offered for Finance Majors and Minors only. Non-Finance Majors and Minors must register for FINA 370. NOTE: Students who have received credit for FINA 370 or 467, or IBUS 370 or 469 may not take this course for credit.

FINA 480 Management of Financial Institutions (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. The objective of this course is to provide a framework for understanding the fundamental variables and relationships that affect the management of Canadian financial institutions in the domestic and international environment. Specific

topics include an overview of the financial institutions sector, the regulatory framework, performance and cost analysis, strategic planning, capital structure issues, asset and liability management, management of financial institution risk, international intermediation, and financial innovation. NOTE A/See §200.2 NOTE: Students who have received credit for FINA 461 may not take this course for credit.

FINA 490 Cases in Finance (3 credits)
Prerequisite: FINA 380 or 440; FINA 390 or
460. This course uses case discussions to
focus on the application of the principles of
finance learned in FINA 380 and 390 in
real-world contexts. Cases will cover topics in
corporate finance, investments, and financial
markets and institutions. NOTE A/See §200.2
NOTE: Students who have received credit for
FINA 431 may not take this course for credit.

INTERNATIONAL BUSINESS

Acting Programme Director DANIELLE MORIN

Location

Sir George Williams Campus Annex GM, Room: 201 (514) 848-2721

Programme Objectives The International Business programme aims to improve student's abilities to manage enterprises operating internationally. Through a multi-disciplinary teaching approach, the International Business programme examines the major challenges that face the global business community.

Programmes

- 24 Major in International Business
- 9 IBUS 462, 466, 492
- 15 additional credits chosen from IBUS 370, 465, 471, 493; ANTH 272; ECON 319; POLI 315, 317
- 12 Minor in International Business
- 9 IBUS 462, 466, 492
- 3 additional credits chosen from IBUS 370, 465, 471, 493

Courses

IBUS 370 (also listed as FINA 370) International Financial

Management (3 credits)

Prerequisite: COMM 308 or FINA 315. This course is designed for students to acquire and demonstrate knowledge of the fundamental principles and issues in international financial management. It covers such topics as foreign exchange markets, exchange rate behaviour, structure and meaning of the international balance of payments, the functioning of fixed and floating exchange rate systems, short- and long-term investment and borrowing decisions, eurocurrency markets, foreign exchange risk management, and capital budgeting decisions for overseas investment. In sum, the topics are covered from the perspective of an individual who wishes to know how the international financial environment will affect the firm. NOTE: Students who have received credit for FINA 370 or 467 or IBUS 469 may not take this course for credit.

IBUS 462 (also list

(also listed as MARK 462) Environment of World Business (3 credits)

Prerequisite: COMM 305 or ACCO 218; COMM 215 or DESC 244 or equivalent; COMM 308 or FINA 214; COMM 210 or MANA 266; COMM 224 or MARK 350. This is a foundation course in international business; the objective is to present information which exposes the student to cultural, social, political, economic, legal, and financial environments in which Canadian business executives manage their operations abroad. All students are encouraged to develop their own philosophy towards international business activities by developing research and analytical skills in

analysing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada, etc.

NOTE: Students who have received credit for MARK 462 may not take this course for credit.

IBUS 465 (also listed as MARK 465) International Marketing Management (3 credits)

Prerequisite: COMM 224 or MARK 350; MARK 462 or IBUS 462. This course studies the management approach to international marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational marketing strategies and programmes. Students will execute a project directed to a selected part of the world.

NOTE: Students who have received credit for MARK 465 may not take this course for credit.

IBUS 466 (á

(also listed as MANA 466)
Management of Multinational
Corporations (3 credits)

Prerequisite: MARK 462 or IBUS 462; COMM 222 or MANA 340. This is a course that demonstrates the analytical tools of operations and organization theory applicable within a multinational company. The course is designed to give students a grasp of the problems of strategy formulation and organization, and inculcates a general knowledge of the major parameters in which an international manager operates. Focus is on the Canadian as well as other international companies based in U.S.A., Europe, Japan, etc.

NOTE: Students who have received credit for MANA 466 may not take this course for credit.

IBUS 471 Topics in International Business (3 credits)

Prerequisite: MARK 462 or IBUS 462. This course is intended primarily to provide an opportunity for more intensive study in one or more specific topics of international business. The topic will vary according to the special interests of the professor and the students. NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

IBUS 492 (also listed as MARK 492) Cross-Cultural Communications and Management

(3 credits)

Prerequisite: MARK 462 or IBUS 462. This course deals with the multicultural dimensions of international business operations. The objective

is to develop Canadian managerial skills for effective performance in an international setting. Topics to be covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy. NOTE: Students who have received credit for MARK 492 may not take this course for credit.

IBUS 493 (also listed as MANA 493) International Business Law (3 credits)

Prerequisite: MARK 462 or IBUS 462; COMM 315 or MANA 475. This course is an introduction to international business law. The focus is Canadian but comparative material is included and problems relating to other legal systems are examined. Topics to be covered include private loans applicable to international business transactions, international sales, federal regulations, export controls and anti-dumping, export insurances, and bilateral trade agreements.

NOTE: Students who have received credit for MANA 493 may not take this course for credit.

MANAGEMENT

Faculty

Associate Professor and Chair of the Department KAMAL ARGHEYD

Professors STEVEN H. APPELBAUM VISHWANATH V. BABA A. BAKR IBRAHIM MUHAMMED JAMAL **GARY JOHNS**

Associate Professors J. PIERRE BRUNET MICK CARNEY LINDA DYER LOUIS HÉBERT TERRI LITUCHY JEAN MCGUIRE RICK MOLZ

ROBERT J. OPPENHEIMER WILLIAM TAYLOR

Assistant Professors JOSÉE AUDET **GEOFFREY BELL** STÉPHANE BRUTUS CONSTANTINE KATSANIS KAI LAMERTZ

SHARON LEIBA-O'SULLIVAN

STEVEN SI

MARIE-FRANCE TURCOTTE

Lecturers

NICOLE BÉRUBÉ FRANK CROOKS PIERRE L. DUCHASTEL REJEAN DUPRÉ JOHN FAKOURI MEHDI FARASHAHI ASHRAF GOHAR **ROSALIND KNITTER**

JOSE LAM

CLAUDE MARCOTTE DAVID MARLER

FREDERICK MCGREGOR ZINA MOWSZOWICZ-SUISSA

BASIL MWAWASI TOM O'CONNELL TIMA PETRUSHKA BARBARA SHAPIRO

Adjunct Professors G.S. RAJAN JOYA SEN

Adjunct Executive-in-Residence

PIERRE SEVIGNY

Adjunct Lecturers FREDA RASHKOVAN MARJORIE SHARP

Location

Sir George Williams Campus Annex GM, Room: 503-37

(514) 848-2924

Department **Objectives**

The Management Department plays a critical role in introducing a general management perspective to integrate the specialist orientation of other Departments. As a result, its courses are tailored to be practical and most feature a process of skill-building orientation enhanced by case discussions, experimental exercises, role plays, and student presentations. The major topic areas covered are organizational behaviour and design, strategies and policy, human resource management, entrepreneurship and small business management, industrial relations, and business law.

Programmes

Major in Management

- Credits of MANA 342, 343, 362, 402, 420, 446, 451, 461, 466, 476, 499; **IBUS 492**
- Minor in Management 12
- Credits from the programme of Major in Management
- Minor in Entrepreneurship and Small **Business Management**
- 3 **MANA 451**
- MANA 454 3
- Credits of MANA 343, 420, 476

Major in Human Resource Management

- 3 MANA 342
- **MANA 343**
- **MANA 362**
- **MANA 420**
- **MANA 463**
- Credits of MANA 402, 443, 444, 445, 446, 498

Minor in Human Resource 12 Management

- **MANA 362**
- Credits of MANA 402, 443, 444, 446, 463, 498

Management Co-operative Programme Director BARBARA SHAPIRO, Lecturer (514) 848-2780

The Management Co-operative programme is offered to students who are enrolled in the BComm programme and are majoring in Human Resource Management. Students interested in applying for the Human Resource Management co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms. Students will be under personal supervision and must meet the requirements specified by both the Faculty of Commerce and Administration and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Courses

MANA 211 Business Law (6 credits)
A general survey of the law obtaining in the
Province of Québec, with special emphasis on
the aspects thereof relating to business and
commerce. It includes a basic outline of the law
of domicile, marriage, persons, property,
ownership and its modifications, successions,
gifts and wills, testamentary executors,
contracts, quasi-contracts, offences and quasioffences, privileges, hypothecs and prescription,
and a more detailed study of the contract of
sale, lease and hire of things and of work,
mandate, loan, deposit, partnership, suretyship,
pledge, insurance, and an outline of the basic

NOTE A/See §200.2 NOTE: Commerce and Administration students may not take this course for credit.

law applying to negotiable instruments, corpora-

tions, carriers, bankruptcy and winding up, and

copyrights, patents, and trade marks.

MANA 213 Foundations of Behaviour (3 credits)

The purpose of this course is to introduce the student to those behavioural concepts relevant to the study of organizational problems. Topics include perception, attitudes, personality, group behaviour, roles, and culture as they relate to organizational processes.

NOTE: Students who have received credit for PSYC 200 or equivalent may not take this course for credit.

NOTE: Commerce and Administration students may not take this course for credit.

MANA 266 Foundations of Modern Management (3 credits)

This course introduces students to the basic elements of the managerial process (e.g., planning, organizing, controlling, motivating, etc.) and presents the historical base upon which contemporary management theory and practice is built. The evolution and scope of management are considered, with illustrations from both large and small Canadian enterprises. NOTE: Students entering the BComm or BAdmin programme as of September 1996 may not take this course for credit.

MANA 341 Organization Theory (3 credits)
Prerequisite: COMM 222 or MANA 340. The
function, structure, and processes of organizations provide the focus for study. Interrelation-

ships among the psychosocial, technological, and formal properties of organizations are examined. Emphasis is placed on the diagnosis, analysis of organizational problems, and optimal-design alternatives for improving organizational performance and effectiveness are explored. The objective is to provide the student with a thorough understanding of the nature of contemporary complex organizations.

MANA 342 Organizational Change and Development (3 credits)

Prerequisite: COMM 222 or MANA 340. An administrative perspective of the behavioural and rational empirical strategies for effecting change in organizations. Emphasis is placed on an eclectic approach to the planning and implementation of change. Models and methods of change are reviewed, and opportunities for the development of change-agent skills are provided.

MANA 343 Negotiation and Conflict Resolution (3 credits)

Prerequisite: COMM 222 or MANA 340. This course examines the causes and consequences of disputes and provides alternative strategies for negotiating and resolving conflicts. It utilizes lectures, videos, cases, interactive exercises, empirical research and videotaping to convey concepts and enhance one's ability to effectively negotiate and resolve disputes. NOTE: Students who have received credit for MANA 441 may not take this course for credit.

MANA 362 Human Resource Management (3 credits)

Prerequisite: COMM 222 or MANA 340. The aim of the course is to provide a sound background in fundamentals, theory, principles, and practice of human resource management. It focuses on the areas of human resource planning, personnel recruitment, selection and placement, performance appraisal, and career planning. NOTE A/See §200.2

NOTE: Students who have received credit for MANA 462 may not take this course for credit.

MANA 364 Industrial Relations (3 credits)
Prerequisite: COMM 222 or MANA 340.
Industrial Relations is a survey course designed to provide comprehensive knowledge about the state of labour-management relations in Canada. NOTE A/See §200.2

MANA 365 Collective Bargaining

(3 credits)

Prerequisite: MANA 364; MANA 343 or 441. This course is designed to help the student understand the day-to-day problems of negotiating and administering collective agreements. Course content takes into consideration behavioural aspects of industrial relations. NOTE A/See §200.2

MANA 369 Canadian Business and its Environment (3 credits)

Prerequisite: COMM 215 or DESC 244; ECON 203; COMM 210 or MANA 266; COMM 308 or FINA 214; COMM 224 or MARK 213. The purpose of this course is to examine the functioning of Canadian business and its relationships with its public, including stockholders, consumers, employees, labour, community, and government. Major contemporary issues, such as the impact of technology on people and the physical environment, are examined. NOTE A/See §200.2

MANA 402 Supervisory Practice (3 credits)
Prerequisite: COMM 222 or MANA 340. A
seminar focusing on the emerging understanding of leadership and supervisory techniques in task-oriented organizations. Contemporary concepts and research on leadership and supervision are examined. The seminar analyses the multiple bases for influence and the situational or contingency aspects of leadership. A balance among the conceptual, diagnostic, and experiential approaches to the development of supervisory capability is emphasized.

MANA 420 Business Research Methods (3 credits)

Prerequisite: COMM 222 or MANA 340; COMM 215 or DESC 244. This seminar focuses on the means by which social and organizational data can be gathered, analysed, and interpreted. Needs of the firm for efficient, timely, and unobtrusive research are given special attention. Topic coverage includes applications of the scientific method, research design, field research techniques, data analysis, research utilization, and use of existing information sources. Student projects parallel the classroom activities by designing and conducting business research studies of limited scale.

MANA 442 Managerial Concepts (3 credits)
Prerequisite: COMM 222 or MANA 340. This
course provides an opportunity for intense study
of recent developmental topics within the discipline. Topics might include women in management; managing in Québec; management by
objectives; long-range planning; equity theories
of motivation; changing roles of managers.

MANA 443 Compensation and Benefits Management (3 credits)

Prerequisite: MANA 362 or 462. The purpose of this course is to provide a thorough understanding of the role, conceptual basis, procedures, and methods associated with the management and

administration of compensation and benefits within an organization. Issues such as job families and ladders, salary surveys, position valuation, pay equity, incentive compensation, and benefits administration are addressed.

MANA 444 Training and Development (3 credits)

Prerequisite: MANA 362 or 462. This course examines the conceptual and practical issues regarding orientation of new employees, the socialization process, learning theories and diagnoses, training technologies, developmental strategies, and the management of the training and development function.

MANA 445 Health and Safety Management (3 credits)

Prerequisite: MANA 362 or 462. This course examines the critical aspects of health and safety administration within organizations. It provides a brief overview of the relevant legislation and focuses upon prevention, causes, detection, intervention, reintegration, epidemiological and clinical investigation, and health development. Physical and psychological aspects of health and safety are examined.

MANA 446 Staffing (3 credits)

Prerequisite: MANA 362 or 462. This course is designed to cover the theory, research, and practice of organizational staffing. The primary focus of this course will be on the theoretical, analytical, and conceptual tools needed to effectively staff organizations with qualified employees. The main coverage will include human resource strategy, planning, recruitment, job analysis, measurement, legal issues, and various selection methods. Attention will focus on relevant theory and research as well as techniques for developing valid and reliable selection procedures. Both the strategic needs of the organization and the legal environment of contemporary organizations in Québec and Canada will be considered.

MANA 451 Managing a Small Business (3 credits)

Prerequisite: COMM 410 or MANA 450. This introductory course emphasizes the operational aspects of management that are uniquely important to a small enterprise. It provides opportunity to practise operational decision-making under conditions characteristic for small firms.

MANA 454 Family Business Management

(3 credits)
Prerequisite: COMM 308 or FINA 315;
COMM 224 or MARK 350; COMM 225 or
DESC 250; COMM 222 or MANA 340;
COMM 315 or MANA 475; COMM 410 or
MANA 450; MANA 451; and 39 additional
credits in the Faculty of Commerce and
Administration. This course focuses on family
business management issues such as the
entrepreneurial process, the dual relationship,
conflict management, letting go, succession
planning in the family business, managing the
transition to the next generation, going outside

the family, strategic management and managing strategic change in family firms.

MANA 461 Implementing Competitive Strategies (3 credits)

Prerequisite: COMM 310 or MANA 460. This course concentrates on how the strategy formulated in MANA 460 is implemented by the organization. Organization structures are studied in differing environments. The relationships between organization structures and the organization's strategy are analysed. The problems encountered by general managers as well as middle managers in the process of the implementation of the set policies are studied. NOTE A/See §200.2

MANA 463 Strategic Human Resource Management (3 credits)

Prerequisite: MANA 362 or 462, and any two of the following: MANA 402, 443, 444, 446. This course is a final-year integrative seminar for Human Resource Management majors. It focuses on the philosophies underlying current human resource management principles and policies and the processes of their implementation. It utilizes cases to integrate human resource management areas such as recruitment, selection, training, performance appraisal, compensation, and benefits administration.

MANA 466 (also listed as IBUS 466) Management of Multinational Corporations (3 credits)

Prerequisite: IBUS 462 or MARK 462; COMM 222 or MANA 340. This is a course that demonstrates the analytical tools of operations and organization theory applicable within a multinational company. The course is designed to give students a grasp of the problems of strategy formulation and organization, and inculcates a general knowledge of the major parameters in which an international manager operates. Focus is on the Canadian as well as other international companies based in U.S.A., Europe, Japan, etc. NOTE: Students who have received credit for IBUS 466 may not take this course for credit.

MANA 476 Managerial Law (3 credits)
Prerequisite: COMM 315 or MANA 475. Federal
and provincial government regulation of
business, including bankruptcy, anti-combines,
trade marks and patents, labour law, insurance,
special commercial contracts including secured
transactions, fair employment, environmental law.

MANA 477 The Law of Insolvency and Secured Transactions (3 credits)

Prerequisite: COMM 315 or MANA 475. An examination of the various laws and cases, both federal and provincial, across Canada, governing commercial insolvency, with particular emphasis upon the liability of directors and officers, and the creditor's rights in bankruptcy, including the role of inspectors and the trustee. An examination of the various forms of secured transactions, of which creditors may avail themselves, more particularly financial institutions, including

assignment of book debts, pledge, mortgages, bonds, trust deeds.

MANA 478 Company Law (3 credits)
Prerequisite: COMM 315 or MANA 475. The
examination of important legal issues relating to
the business corporation, including an analysis
of their legal nature and structure, and the
powers, rights, and obligations of directors,
officers, and shareholders, including analysis of
the legal implications, insider trading, company
re-organization, mergers, joint ventures, and
takeovers. These matters are studied through
the Federal, Québec, and Ontario Companies'
Acts and relevant court cases.

MANA 479 Labour Law (3 credits) Prerequisite: COMM 315 or MANA 475. A study of the law and relevant court cases dealing with major labour-management issues, including collective bargaining, union certification, strikes, lock-outs, grievances, and arbitration. Covers Canadian law, primarily that of Québec.

MANA 493 (also listed as IBUS 493) International Business Law (3 credits)

Prerequisite: IBUS 462 or MARK 462; COMM 315 or MANA 475. This course is an introduction to international business law. The focus is Canadian but comparative material is included and problems relating to other legal systems are examined. Topics to be covered include private loans applicable to international business transactions, international sales, federal regulations, export controls and anti-dumping, export insurances, and bilateral trade agreements.

NOTE: Students who have received credit for IBUS 493 may not take this course for credit.

MANA 498 Special Topics in Human Resource Management (3 credits)

Prerequisite: Written permission of the Department. This course is intended to complement and supplement human resource management (HRM) courses taken previously or concurrently. The course emphasizes HRM literature and modern thought.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

MANA 499 Special Topics in Management (3 credits)

Prerequisite: Written permission of the Department. Intended to complement and supplement business courses taken previously or concurrently, this course emphasizes business literature and modern thought. Students are encouraged to work independently on research topics of interest to them. Students repeating MANA 499 register for credits under MANA 498. NOTE A/See §200.2

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

61.100

MARKETING

Faculty

Associate Professor and Chair of Department B. ZEKI GIDENGIL

Professor Emeritus V.H. (MANEK) KIRPALANI

Professors ULRIKE de BRENTANI MICHEL LAROCHE

Associate Professors
BRYAN BARBIERI
MICHEL J. BERGIER
B. KEMAL BÜYÜKKURT
ANNAMMA JOY
LEA PREVEL KATSANIS

K. LEE MCGOWN JERRY ROSENBLATT CHRISTOPHER A. ROSS GAD SAAD MRUGANK V. THAKOR

Assistant Professors RAMDAS CHANDRA MICHELE PAULIN SOURAV RAY

Lecturers M.A. CIPRIANO MARIE JOSÉE ERRUNZA HAROLD SIMPKINS JEAN ST-ONGE

Location

Sir George Williams Campus Annex GM, Room: 300-31 (514) 848-2952

Department Objectives

The Marketing Department seeks to cultivate in each student the skills and perspectives essential for effective and responsible marketing. Emphasis is on creating marketing strategies and plans based on a thorough understanding of consumer and industrial buying behaviour. The Department is committed to fostering a dynamic entrepreneurial orientation together with an appreciation of the essence, importance, and potential power of marketing.

Programmes

- 24 Major in Marketing
- 3 MARK 402 3 MARK 405
- 3 MARK 495
- 15 MARK credits offered by the Department.

12 Minor in Marketing

- 3 MARK 402
- 3 MARK 405
- 6 MARK credits offered by the Department.

Marketing Co-operative Programme

Director HAROLD J. SIMPKINS, Sessional Lecturer (514) 848-2955

The Marketing Co-operative programme is offered to students who are enrolled in the BComm programme and are majoring in Marketing. The Marketing co-op is a combination of the common 42-credit core, the Marketing Major and four Work terms. The programme seeks to cultivate in each student the skills and perspectives essential for effective and responsible marketing. Students interested in applying for the Marketing co-op should refer to §24 where a full description of the admission requirements is provided.

Courses

MARK 201 Introduction to Marketing (3 credits)

This course introduces non-Commerce students to the managerial concepts and practices of marketing. The process of developing a marketing strategy is examined along with the factors and interrelationships related thereto. Readings and cases are used to help students apply these concepts in a variety of business settings. NOTE 1: This course is available to non-Commerce programme students only. Any such student intending to register in the Marketing

Cluster for Non-Commerce Students or intending to take specific upper-level Marketing courses must take this course as a prerequisite.

NOTE 2: Students who have received credit for MARK 213 or 350 may not take this course for credit.

MARK 402 Marketing Research (3 credits)
Prerequisite: COMM 224 or MARK 201 or 350.
The role of research in the marketing process,
the role of models, and the development of
measurement techniques are discussed.

Emphasis is placed on the nature and scope of marketing research methods for obtaining internal and external data, and on the steps and principles involved in gathering and analysing data. The student is also briefly introduced to applications of marketing research and to the technique involved in conducting a marketing study. NOTE A/See §200.2

MARK 405 Consumer Behaviour (3 credits) Prerequisite: COMM 224 or MARK 201 or 350. This course analyses the motivations, roles, and behaviour of the consumers, how they are affected by economic, social, and cultural influences, and how the marketer may model this behaviour for decision-making purposes. NOTE A/See §200.2

NOTE 1: Although not required, it is strongly recommended that MARK 402 be taken prior to or concurrently with this course.

NOTE 2: Students who have received credit for MARK 352 may not take this course for credit.

MARK 453 Advertising (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. The objectives of this course are to provide the student with an introduction to an understanding of the principles of advertising from three different viewpoints: the nature of services provided by advertising agencies, the needs of the users (i.e. business, institutions) of these services, the needs of society in economic, ethical, and legal terms.

NOTE A/See §200.2

MARK 454 Personal Selling and Sales Management (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. This course has a dual focus: the cultivation of personal selling skills, and the theoretical and applied aspects of managing the personal selling function. Cases, readings, simulations, and presentations are deployed to achieve the course goals. NOTE A/See §200.2

MARK 455 Direct-Response Marketing (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. This course explores state-of-the-art managerial apporaches and analytical techniques for developing, executing, and evaluating direct-response marketing programmes. Through recent case studies, comprehensive projects, and/or empirical field research, the student will learn about strategies, offer planning and positioning, list selection and segmentation, creative strategies, data base marketing, fulfilment process, testing, media (catalogues, mail, telephone, broadcast, print, and others) and application of direct marketing to industrial settings.

MARK 460 Integrated Marketing Communications (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350; MARK 402; 352 or 405; 453; 455 or 491M previously or concurrently. This course examines the disciplines, rigours, and inter-

relationships involved in planning and synergistically integrating the various components of a firm's communication mix, with particular emphasis on advertising, sales promotion, public relations, personal selling, and reseller support. Students will develop an actual integrated marketing communications plan for a product, service, or idea using the concepts discussed in class.

MARK 462 (also listed as IBUS 462) Environment of World Business (3 credits)

Prerequisite: COMM 305 or ACCO 218; COMM 215 or DESC 244 or equivalent; COMM 308 or FINA 214; COMM 210 or MANA 266; COMM 224 or MARK 350. This is a foundation course in international business; the objective is to present information which exposes the student to cultural, social, political, economic, legal, and financial environments in which Canadian business executives manage their operations abroad. All students are encouraged to develop their own philosophy towards international business activities by developing research and analytical skills in analysing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada, etc.

NOTE: Students who have received credit for IBUS 462 may not take this course for credit.

MARK 463 Retailing (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. This course seeks to apply the theories of marketing and administration to the retail situation. Topics to be covered include site selection for single and multi-unit retail outlets, organizing and staffing the retail operation, the wholesaler-retailer relationship, consumer behaviour in the retail situation. The impact of such new developments as consumer cooperatives, franchising, discounting, and computer technology on the future of retailing is also considered.

NOTE A/See §200.2

MARK 465 (also listed as IBUS 465) International Marketing Management (3 credits)

Prerequisite: COMM 224 or MARK 350; MARK 462 or IBUS 462. This course studies the management approach to international marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational marketing strategies and programmes. Students will execute a project directed to a selected part of the world. NOTE: Students who have received credit for IBUS 465 may not take this course for credit.

MARK 480 Customer Service Excellence (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. This course explores the nature and scope of customer service, its importance in business, its impact on profitability, its dimensions, and how to manage it. Through field studies in given industries, the student will 1) identify examples of outstanding service and of very poor service to gain a better appreciation of customers' expectations and of their assessment of current levels of customer service delivery, 2) analyse service encounters to understand the many dimensions of customer service, 3) gather, evaluate, and improve existing measures of customer satisfaction to learn how companies should go about getting feedback about themselves, and 4) identify and evaluate current customer service training practices to understand whether companies are "paying lip service" or "walking the talking".

MARK 485 Business-to-Business Marketing (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. The course focuses on the managerial aspects of industrial marketing. The concept of organization buying behaviour and its impact on marketing strategy formulation are discussed. Management of the industrial marketing mix considering product service development, intelligence, promotion, channels, and performance measurement is covered, both in existing product lines and new product-launch activities.

MARK 486 Product Strategy and Innovation (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. The focus of this course is the development of a dynamic and successful product strategy for the organization. Topics covered include product life cycle concepts, the adoption and diffusion of innovations, strategic product planning, developing the service offering, and the process of innovating and launching new products and services.

MARK 491 Special Topics Seminar (3 credits)

Prerequisite: Written permission of the Department. This seminar is an inquiry into various selected topics which vary from year to year. Students repeating MARK 491 register for credits under MARK 492. NOTE A/See §200.2 NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

MARK 492 (also listed as IBUS 492) Cross-Cultural Communications and Management (3 credits)

Prerequisite: MARK 462 or IBUS 462. This course deals with the multicultural dimensions of international business operations. The objective is to develop Canadian managerial skills for effective performance in an international setting. Topics to be covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy. NOTE: Students who have received credit for IBUS 492 may not take this course for credit.

MARK 495 Strategic Marketing Planning (3 credits)

Prerequisite: Sixty credits including 15 credits in Marketing of which six credits must be MARK 402 and 405. This is a holistic, integrative, capstone course directed primarily to cultivating the skills and technique required in effective marketing planning. Various pedagogical tools including cases, readings, and a major project will be deployed to achieve the course goals. Students will develop an actual marketing plan for a product, service, or idea using the concepts and techniques studied throughout their major programme.

NOTE: Students who have received credit for MARK 490 may not take this course for credit.

61.120

ADMINISTRATION

Courses

ADMI 201 Introduction to Administration (Administered by the Finance Department)
(3 credits)

This course is intended to develop a basic understanding of the role of administration in our society. The course includes a survey of different forms of organizations, their social and legal responsibilities, and how they function to achieve their goals.

NOTE: Commerce and Administration students may not take this course for credit.

ADMI 202 Perspective on Business (Administered by the Finance Department) (3 credits) This course is designed to review the historical development of business (in Canada in particular) and to examine the relationships between the firm (management) and the owners, the employees, the customers, the government, and the community. Further, it studies some of the problems facing Canadian business today: the dehumanizing aspect, pollution problems, large vs. small firms, foreign ownership, competition, etc.

NOTE: Commerce and Administration students may not take this course for credit.

61.140 PROGRAMME OPTIONS FOR NON-COMMERCE STUDENTS

Courses/Non-Commerce Students

Students not enrolled in the Faculty of Commerce and Administration programme may register for six credits per term for a maximum of 30 credits (total) within the Faculty of Commerce and Administration. Students not registered in the Faculty of Commerce and Administration, who wish to undertake any courses offered by the Faculty, but do not have the stated prerequisites, must obtain permission in writing from the Student Request Committee, Faculty of Commerce and Administration *prior to registration*. The Office of the Associate Dean reserves the right to deregister those students who do not adhere to academic regulations.

CERTIFICATE IN BUSINESS STUDIES

This programme is not open to students registered in a programme leading to an undergraduate degree.

Students may transfer into the Certificate programme up to 12 credits earned in an incomplete degree or Certificate programme or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Admission Requirements

 a) Diploma of Collegial Studies or the equivalent; MATH 208, 209; ECON 201, 203; INTE 290 or COMP 201

or

Mature students: MATH 208, 209; ECON 201, 203; INTE 290 or COMP 201.

Programme

- 30 Certificate in Business Studies
- 24 COMM 210, 212, 215, 217, 220, 222, 224, 225
- 6 additional credits from the Faculty of Commerce and Administration chosen in consultation with an academic adviser.

MINOR IN BUSINESS STUDIES

This programme is not open to students registered in a programme leading to an undergraduate degree in the Faculty of Commerce and Administration.

NOTE: A GPA of 2.50 is required for entrance into this Minor.

Admission Requirements

MATH 208, 209; ECON 201, 203; INTE 290 or COMP 201.

Programme

- 30 Minor in Business Studies
- 24 COMM 210, 212, 215, 217, 220, 222, 224, 225
- 6 additional credits from the Faculty of Commerce and Administration chosen in consultation with an academic adviser.

Programme

MARKETING CLUSTER FOR NON-COMMERCE STUDENTS

This 15-credit cluster is available to students registered in undergraduate programmes outside the Faculty of Commerce and Administration. Students choosing this cluster have the opportunity to add a business-oriented marketing component to their arts, science, engineering, or fine arts degrees.

- 15 Marketing Cluster for Non-Commerce Students
- 9 MARK 201, 402, 405
- 6 Additional credits from MARK 453, 454, 455, 460, 463, 480, 485, 486

Programme

THE BASICS OF BUSINESS CLUSTER

Arts and Science students should make it their business to get some insight into the world of commerce and administration.

The Basics of Business Cluster

Chosen from ACCO 230, 240; ADMI 201, 202; COMM 215; MANA 211, 213, 266; MARK 201 NOTE: This cluster is not open to BComm/BAdmin students. Not all cluster credits are transferable to the BComm/BAdmin programme.

61.150 COMPUTER SCIENCE

For a major in Management Information Systems see §61.50

61.160 SPECIAL CERTIFICATE PROGRAMMES

There are many organizations within the business community designed to serve the needs of people working in specialized areas of business. These organizations recognize that the educational qualifications of those seeking membership must be continually upgraded. Therefore, they sponsor an Academic Certificate which may be obtained through correspondence courses, or through a

The Faculty of Commerce and Administration cooperates with these business organizations by permitting personnel to register as Visiting students, and to take courses leading to a certificate to be awarded by the organization concerned.

Students must comply with the University regulations regarding dates of application and Visiting Commerce student entrance requirements as outlined in the Academic Calendar §11. In addition, they must meet the requirements of the specific organization.

The credit courses taken may be applied towards the BComm degree, provided the student meets the admission requirements and wishes to transfer from Visiting Commerce status to undergraduate status after completing a Certificate programme. Students are advised that they must meet the BComm curriculum requirements in force at the date of transfer.

Each Certificate programme has one or more special courses required to complete the programme. These courses do not carry credit towards an undergraduate degree and are designated as non-credit courses.

Students interested in the following Certificate programmes may obtain details of required courses from the organization concerned:

The American Marketing Association (Montréal Chapter)

Institute of Canadian Bankers

The Insurance Institute of Canada

The Trust Companies Institute of Canada

Professional Secretaries International (CPS)

Canadian Institute of Management

61.170 SPECIAL PROGRAMMES IN ACCOUNTANCY

The three professional organizations listed below recognize certain Concordia University courses for course exemptions or standing in their professional designation programmes.

L'ORDRE DES COMPTABLES AGRÉÉS DU QUÉBEC: Chartered Accountant (CA)

The Faculty of Commerce and Administration offers a Diploma in Accountancy which has been approved by the Order of Chartered Accountants of Québec. Entry into the programme normally requires an undergraduate degree in Commerce, and a Major in Accountancy with high academic standing. Applicants lacking an appropriate pattern of undergraduate work will be required to complete successfully certain qualifying courses, as assigned by the director of the Diploma programme. For further details, refer to the Graduate Calendar of Concordia's School of Graduate Studies.

LA CORPORATION PROFESSIONNELLE DES COMPTABLES EN MANAGEMENT ACCRÉDITÉS DU QUÉBEC: Certified Management Accountant (CMA)

Students who wish to follow the CMA programme must register with L'Ordre des comptables en management accrédités du Québec, 715 Square Victoria 3rd Floor, Montréal, Québec, H2Y 2H7, (514) 849-1155 / (800) 263-5390. The list of courses comprising the CMA programme is shown below:

ECON 201 ECON 203 COMM 215 COMM 217 Introduction to Microeconomics Introduction to Macroeconomics **Business Statistics** Financial Accounting

COMM 222 COMM 225 Production and Operations Management COMM 301 Management Information Systems COMM 305 COMM 308 Introduction to Finance COMM 310 COMM 310 Strategy and Competition COMM 315 Business Law and Ethics ACCO 310 Intermediate Accounting I ACCO 320 Intermediate Accounting II ACCO 330 Cost and Management Accounting ACCO 340 ACCO 350 ACCO 410 ACCO 420 Advanced Financial Accounting ACCO 430 ACCO 440 ACCO 440 ACCO 450 ACCO 470A Special Topics in Accounting (Management Accounting) MANA 476 Management Accounting Management Accounting Management Accounting Management Accounting	COMM 220	Markets
COMM 301 COMM 305 COMM 308 COMM 310 COMM 310 COMM 315 ACCO 310 ACCO 320 ACCO 330 ACCO 340 ACCO 350 ACCO 350 ACCO 350 ACCO 420 ACCO 420 ACCO 430 ACCO 440 ACCO 450 ACCO 470A Management Information Systems Management Accounting Introduction to Finance Strategy and Competition Business Law and Ethics Intermediate Accounting I Intermediate Accounting II Cost and Management Accounting Income Taxation in Canada Accounting Information Systems Accounting Information Accounting Advanced Financial Accounting Advanced Management Accounting Accounting Accounting Accounting Information Systems A	COMM 222	Organizational Behaviour and Theory
COMM 305 COMM 308 Introduction to Finance COMM 310 COMM 315 ACCO 310 ACCO 320 ACCO 330 ACCO 340 ACCO 340 ACCO 350 ACCO 3	COMM 225	Production and Operations Management
COMM 308 COMM 310 Strategy and Competition COMM 315 Business Law and Ethics ACCO 310 ACCO 320 Intermediate Accounting I ACCO 330 Cost and Management Accounting ACCO 340 Income Taxation in Canada ACCO 350 Accounting Information Systems ACCO 420 Advanced Financial Accounting ACCO 430 ACCO 440 ACCO 450 ACCO 470A Special Topics in Accounting (Management Accounting)	COMM 301	Management Information Systems
COMM 310 COMM 315 Business Law and Ethics ACCO 310 Intermediate Accounting I ACCO 320 Intermediate Accounting II ACCO 330 Cost and Management Accounting ACCO 340 Income Taxation in Canada ACCO 350 Accounting Information Systems ACCO 420 Advanced Financial Accounting ACCO 430 ACCO 440 Advanced Management Accounting ACCO 450 ACCO 470A Special Topics in Accounting (Management Accounting)	COMM 305	Managerial Accounting
COMM 315 ACCO 310 Intermediate Accounting I ACCO 320 Intermediate Accounting II ACCO 330 Cost and Management Accounting Income Taxation in Canada ACCO 350 Accounting Information Systems ACCO 420 Advanced Financial Accounting ACCO 430 Accounting ACCO 440 Advanced Management Accounting ACCO 450 ACCO 470A Special Topics in Accounting (Management Accounting)	COMM 308	Introduction to Finance
ACCO 310 ACCO 320 Intermediate Accounting I ACCO 320 Cost and Management Accounting II ACCO 330 ACCO 340 Income Taxation in Canada ACCO 350 Accounting Information Systems ACCO 420 Advanced Financial Accounting ACCO 430 Accounting Advanced Management Accounting ACCO 440 Advanced Taxation ACCO 450 Financial Auditing ACCO 470A Special Topics in Accounting (Management Accounting)	COMM 310	Strategy and Competition
ACCO 320 ACCO 330 Cost and Management Accounting II ACCO 340 Income Taxation in Canada ACCO 350 Accounting Information Systems ACCO 420 Advanced Financial Accounting ACCO 430 Accounting Advanced Management Accounting ACCO 440 Advanced Taxation ACCO 450 Financial Auditing ACCO 470A Special Topics in Accounting (Management Accounting)	COMM 315	Business Law and Ethics
ACCO 330 ACCO 340 ACCO 350 ACCO 350 ACCO 420 ACCO 420 ACCO 430 ACCO 430 ACCO 430 ACCO 450 ACCO 450 ACCO 470A Cost and Management Accounting Income Taxation in Canada Accounting Information Systems Accounting Information Accounting Accounting Accounting Advanced Financial Accounting Advanced Taxation Financial Auditing Accounting (Management Accounting)	ACCO 310	Intermediate Accounting I
ACCO 340 ACCO 350 ACCO 420 ACCO 420 ACCO 430 ACCO 430 ACCO 440 ACCO 450 ACCO 450 ACCO 470A ACCO 470A Income Taxation in Canada Accounting Information Systems Accounting Information Systems Accounting Information Accounting Accounting Information Accounting Advanced Financial Accounting Financial Auditing Special Topics in Accounting (Management Accounting)	ACCO 320	Intermediate Accounting II
ACCO 350 Accounting Information Systems ACCO 420 Advanced Financial Accounting ACCO 430 Advanced Management Accounting ACCO 440 Advanced Taxation ACCO 450 Financial Auditing ACCO 470A Special Topics in Accounting (Management Accounting)	ACCO 330	Cost and Management Accounting
ACCO 420 Advanced Financial Accounting ACCO 430 Advanced Management Accounting ACCO 440 Advanced Taxation ACCO 450 Financial Auditing ACCO 470A Special Topics in Accounting (Management Accounting)	ACCO 340	Income Taxation in Canada
ACCO 430 Advanced Management Accounting ACCO 440 ACCO 450 ACCO 470A ACCO 470A ACCO 470A Advanced Taxation Financial Auditing Special Topics in Accounting (Management Accounting)	ACCO 350	Accounting Information Systems
ACCO 440 ACCO 450 ACCO 470A	ACCO 420	Advanced Financial Accounting
ACCO 450 Financial Auditing ACCO 470A Special Topics in Accounting (Management Accounting)	ACCO 430	Advanced Management Accounting
ACCO 470A Special Topics in Accounting (Management Accounting)	ACCO 440	Advanced Taxation
(Management Accounting)	ACCO 450	Financial Auditing
(0	ACCO 470A	Special Topics in Accounting
MANA 476 Managerial Law		(Management Accounting)
	MANA 476	Managerial Law

NOTES:

ECON 201

- 1. This equivalence table is subject to amendment by the Corporation.
- 2. Students taking University courses must satisfy the necessary prerequisite courses.
- The Entrance Examination of the Society of Management Accountants of Canada is mandatory.
 Coaching seminars for these courses are encouraged prior to writing the Entrance Examination.
 A student may not sit for this examination until all other Corporation courses or their equivalents have been successfully completed.
- 4. Prospective CMA students should note that the above sequence of courses is a prerequisite to the new CMA programme, which commences with an Entrance Examination (held in June each year). It is necessary to sit the Entrance Examination in order to take part in a 24-month Professional Programme. The Programme consists of work experience, independent study, group and residential sessions. All candidates for the Entrance Examination must be registered student members of the Corporation.

LA CORPORATION PROFESSIONNELLE DES COMPTABLES GÉNÉRAUX LICENCIÉS DU QUÉBEC: Certified General Accountant (CGA)

Students who wish to follow the CGA programme must register with L'Ordre des comptables généraux licenciés du Québec located at 445 boulevard St-Laurent Bureau 450, Montréal, Québec, H2Y 2Y7, (514) 861-1823.

The list of courses comprising the CGA Academic Programme is shown below:

ECON 203	Introduction to Macroeconomics
COMM 215	Business Statistics
COMM 217	Financial Accounting
COMM 220 (3)	Markets
COMM 301	Management Information Systems
COMM 305	Managerial Accounting
COMM 308 (3)	Introduction to Finance
COMM 310	Strategy and Competition
COMM 315	Business Law and Ethics
ACCO 310	Intermediate Accounting I
ACCO 320	Intermediate Accounting II
ACCO 330	Cost and Management Accounting
ACCO 340 (4)	Income Taxation in Canada
ACCO 350 (2) (5)	Accounting Information Systems
ACCO 400 (1)	Accounting Theory
ACCO 410 (1)	Governmental and Not-for-Profit Accounting
ACCO 420 (1)	Advanced Financial Accounting
ACCO 440 (4)	Advanced Taxation
ACCO 450 (2) (5)	Financial Auditing
ACCO 460 (5)	Operational Auditing

Introduction to Microeconomics

ACCO 470D (2)

ACCO 490 (4) MANA 478

Special Topics in Accounting (Advanced Auditing) Seminar in Taxation Company Law

(1) Prerequisite to the Financial Accounting (FA4) examination(2) Prerequisite to the Auditing 2 (AU2) examination(3) Prerequisite to the Finance 2 (FN2) examination

- (4) Prerequisite to the Taxation 2 (TX2) examination
- (5) Prerequisite to the Management Auditing 1 (MU1) examination

NOTE: The listing above is subject to amendment. Please communicate with the programme coordinator.

FACULTY OF ENGINEERING AND COMPUTER SCIENCE

71.10	FACULTY 71.10.1 71.10.2 71.10.3 71.10.4 71.10.5 71.10.6 71.10.7 71.10.8	OF ENGINEERING AND COMPUTER SCIENCE Programmes Offered Admission Requirements Academic Regulations Registration Regulations Graduation Regulations Availability of Programmes Course Sequences The Co-operative Format
71.20	BENG 71.20.1 71.20.2 71.20.3 71.20.4 71.20.5 71.20.6	Curriculum for the Degree of BEng Extended Credit Programme Accreditation by the Canadian Council of Professional Engineers Membership in the Order of Engineers of Québec Degree Requirements Complementary Studies
71.30	DEPARTI 71.30.1 71.30.2 71.30.3	MENT OF ELECTRICAL AND COMPUTER ENGINEERING Course Requirements (BEng in Electrical Engineering) Course Requirements (BEng in Computer Engineering) The Co-operative Format
71.40	DEPARTI 71.40.1 71.40.2 71.40.3	MENT OF MECHANICAL ENGINEERING Course Requirements (BEng in Mechanical Engineering) Course Requirements (BEng in Industrial Engineering) The Co-operative Format
71.50	DEPARTI 71.50.1 71.50.2 71.50.3	MENT OF BUILDING, CIVIL AND ENVIRONMENTAL ENGINEERING Course Requirements (BEng in Building Engineering) Course Requirements (BEng in Civil Engineering) The Co-operative Format
71.60	ENGINEE	RING COURSE DESCRIPTIONS
71.70	71.70.1 71.70.2 71.70.3 71.70.4 71.70.5 71.70.6 71.70.7 71.70.8 71.70.9	Curriculum for the Degree of BCompSc Degree Requirements Extended Credit Programme Honours Programme Minor in Computer Science Programmes Related to Computer Science The Co-operative Format Curriculum for the Degree of BEng in Software Engineering Degree Requirements for the BEng in Software Engineering The Co-operative Format Course Descriptions
71.80	DIGITAL	IMAGE/SOUND AND COMPUTER SCIENCE

FACULTY OF ENGINEERING AND COMPUTER SCIENCE

Dean

M. NABIL ESMAIL

Associate Dean, Undergraduate Programmes and Student Affairs TERRILL FANCOTT

Associate Dean, Graduate Programmes and Research RAMA B. BHAT

Associate Dean, Instructional Affairs KHASHAYAR KHORASANI

Chair, Department of Electrical and Computer Engineering

J. ČHARLĚS GIGUÈRE

Chair, Department of Mechanical Engineering SUONG VAN HOA

Chair, Department of Building, Civil and Environmental Engineering OSAMA MOSELHI

Chair, Department of Computer Science HON F. LI

Location

Sir George Williams Campus J.W. McConnell Building, Room: LB 1001; (514) 848-3109 Student Affairs, Room LB 1015; (514) 848-3056

Objectives

By dedicating itself to programme excellence, the Faculty seeks to prepare its graduates not only to practice their professions well into the twenty-first century but also to participate, in national and international affairs, as good citizens with a social conscience. It is equally dedicated to the advancement of knowledge through research and graduate education, and to the development of the professions of engineering and computer science. The Faculty strives to provide an environment of equal opportunity, collegiality, and lively intellectual debate for all members of its community.

71.10 FACULTY OF ENGINEERING AND COMPUTER SCIENCE

71.10.1 Programmes Offered The following programmes are offered in the Faculty of Engineering and Computer Science:

- BEng degrees in Building, Civil, Computer, Electrical, Industrial, Mechanical Engineering, and Software Engineering.
- 2. BCompSc degree.
- Minor in Computer Science.

The requirements for the programmes are different, and the appropriate section in the following pages must be consulted for each.

71.10.2 Admission Requirements General admission requirements are listed in §13.

In addition, the following specific requirements exist for the various programmes. Applicants should specify their choice of programme on their application.

Students entering the Faculty of Engineering and Computer Science are presumed to have acquired some familiarity with computers and programming, either through a course or through time spent working with a personal or other computer.

APPLICANTS FROM QUÉBEC INSTITUTIONS

Successful completion of a two-year pre-university cégep programme is required, including the specific courses in the appropriate profile, as follows:

BEng (all programmes) **BCompSc (Computer Systems and Software Systems Options)**

> Cégep Profile 10.10 Mathematics — 103, 105, 203

Physics — 101, 201, 301 Chemistry — 101, 201 Biology — 301

BCompSc (Information Systems and Computer Applications Options; and Minor in Computer Science)

> Cégep Profile 10.12 Mathematics — 103, 105, 203

Applications from graduates of cégep technology programmes will also be considered. Programme requirements for successful applicants will be determined on an individual basis.

APPLICANTS FROM OUTSIDE QUÉBEC

Academic qualifications presented by students applying from institutions outside Québec should be comparable to those expected of students applying from within Québec.

Where the pre-university education is shorter than in Québec, students may be considered for admission to the first year of the Extended Credit Programme. (See §13.3.2 to 13.3.6, §71.20.2, and 71.70.3)

MATURE ENTRY

Admission requirements are listed in §14.

Students should refer to the Academic Regulations of the University in §16.

71.10.3 Academic Regulations

Definitions

Assessable courses: all record entries of courses listed in this Concordia Calendar for which a grade point value is specified in §16.3.3. However, any course which is a requirement for admission to a programme offered by the Faculty of Engineering and Computer Science will not be counted unless specifically listed on the student's admission letter.

Dean's Office: appropriate member of the Dean's Office, normally the Associate Dean, Student Affairs. Programme of Study: course requirements in effect at the time of the latest admission or re-admission to a programme, for example, BEng (Civil) or BCompSc (Information Systems), including modifications on an individual basis as specified or approved in writing by the Associate Dean's Office, or the Student Request Committee of Faculty Council.

Grade Points: as defined in §16.3.3 of this Calendar.

Weighted Grade Point Average (WGPA): as defined in §16.3.10 of this Calendar. A grade obtained as a result of writing a supplemental examination and/or completing the work for a course graded "INC" or "MED" is included as part of the assessment period in which it is recorded.

Academic year: a period of time which includes a Summer and its subsequent Fall and Winter terms.

Objectives

The objectives of these regulations are:

- to ensure that the Faculty can certify that all of its graduates are qualified to enter their profession, and
- b) to ensure that students can, with the assistance or intervention of the Faculty, assess themselves objectively and plan programmes of study designed to meet their individual needs.

Grading System

See §16.3.3 for the Concordia grading system.

NOTE: Although a "C-" grade is designated as Satisfactory, a weighted grade point average of 2.00 is required for acceptable standing in the Faculty of Engineering and Computer Science.

Regulations

- Students' standings are assessed at the end of each academic year providing they have registered for at least 12 credits subsequent to their previous assessment, or in the case of a first assessment, subsequent to their admission to a programme of study.
 Standings of students who have attempted less than 12 credits since their last assessment are assessed as follows:
- The standings of potential graduates are determined on the basis that these credits constitute an extension of the last assessment period.
- b) The standings of other students are determined at the end of the academic year in which they have attempted a total of at least 12 credits since their last assessment.
- Students' standings are determined according to the following criteria.

Acceptable Standing:

A WGPA of at least 2.00 for the assessment period.

Students in acceptable standing may proceed subject to the following conditions: any failing grade must be cleared by passing the supplemental examination, if one exists, and/or completing the work for the course or by repeating the failed course or in the case of an elective, by replacing the failed course by an alternative within the same group of electives. Any variation must be approved by the Associate Dean's Office.

Conditional Standing:

A WGPA of at least 1.50 but less than 2.00 for the assessment period.

Students in conditional standing may not write supplemental examinations, but may proceed subject to the following conditions.

- They must successfully repeat all courses in which failing grades were obtained, or replace them by alternatives approved by the appropriate member of the Associate Dean's Office in consultation with the student's Department.
- They must repeat or replace by approved alternatives at least one-half of those courses in which they obtained grades in the "D" range. The specific courses to be repeated will be determined by the appropriate member of the Associate Dean's Office in consultation with the student's Department.
- Courses to be taken may be specified by the Associate Dean's Office. In no case will the number exceed five per term for full-time students and two per term for part-time students.
- They must obtain acceptable standing at the time of their next assessment.

Failed Standing:

Failure to meet the criteria for acceptable or conditional standing, or conditional standing over two consecutive assessments.

Failed students may not write supplemental examinations: they are subject to the following regulations.

- Failed students who are not subject to regulation 2 below may apply for readmission through the Dean's Office of the Faculty to which they wish to be readmitted. If readmitted, they will be placed on academic probation. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.
- Students who are in failed standing for a second time will be dismissed from the University. In subsequent years, should they wish to return to university studies, they must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

Availability of Supplemental Examinations

- Supplemental examinations are available only to students in acceptable standing who have an "F" grade in a course for which such an examination is offered.
- Except as specified in 4 below, or otherwise approved by the Faculty Council for individual courses, supplemental examinations are available in all 200- and 300-level courses offered by the Faculty.
- 3. Supplemental examinations are available in those 400-level courses offered by the Faculty for which:
- it is required that a student pass the final examination as a condition for passing the course, or
- the final examination contributes at least 50% of the mark producing the final grade for the
- Supplemental examinations are not offered in Computer Science courses at the 200 level other than COMP 201 and COMP 212.

71.10.4 Registration Regulations

- 1. Students (other than failed students) whose registration in the programme has lapsed for 30 consecutive months or more must apply to the Associate Dean's Office in order to have their curriculum obligations re-evaluated as per paragraph 2 of §16.2.1 of this Calendar. Permission to register will be granted only upon presentation of the results of this re-evaluation.
- The maximum regular session course load for full-time students in the regular programmes is three more than one-third of the total credits for their particular option as specified in subsequent sections.
- The maximum regular session course load for full-time students in the Extended Credit and Mature Student programmes is 30 credits until they have completed all the courses required beyond those specified for their particular option in subsequent sections.
- The fall- and winter-term course loads of full-time students may be unbalanced by up to three credits without permission; further differences between the two terms require the permission of the appropriate Associate Dean, Student Affairs or delegate.
- Except for students registered for the co-operative format, the maximum load in a Summer Session is eight credits, with no more than four and a half credits in either of its terms.

71.10.5 Graduation Regulations Students must be in acceptable standing and satisfy the requirements specified for the academic programme in which they were admitted. The structure and courses of the programme may change in the period between admission and graduation due to curriculum development, but students remaining in acceptable standing are not required to complete more credits than were required at the time they were admitted.

The maximum number of credits obtained as an Independent student which may be transferred into programmes offered by the Faculty of Engineering and Computer Science is as follows:

BEng and BCompSc: 30

71.10.6 Availability of Programmes Full-time students in the Engineering programme will choose a six- or eight-term sequence. Due to the heavy workload involved, six-term sequences are only recommended for the exceptional student. In general, introductory level courses are offered in both day and evening. Subject to the Registration Regulations in §71.10.4 above, a student may register on a part-time basis. Further information on sequencing may be found in the Undergraduate Programme Guide issued by the Office of the Associate Dean.

71.10.7 Course Sequences The Undergraduate Programme Guide specifies course sequences for the BEng and BCompSc programmes, including their Mature Entry and Extended Credit programmes.

71.10.8 The Co-operative Format A limited number of high ranking students entering the first year of the regular programme leading to the BCompSc degree and the BEng degree are permitted to undertake their studies in the co-operative format in conjunction with the Institute for Co-operative Education. See §24.

The academic content is identical to that of the regular programmes; however, in order to continue their studies in the co-operative format in the Faculty of Engineering and Computer Science, or to graduate from one of its programmes as Members of the Institute for Co-operative Education, students must:

- maintain a cumulative grade point average (CGPA)* of at least 2.70 after their first year of study in their programme with no single term below 2.50;
- (ii) be assigned a pass for each work term report.

For additional information, please refer to §24.

*The CGPA is calculated over all courses attempted since admission to the programme in the manner described in §16.3.10 for the WGPA.

71.20 BENG

71.20.1 Curriculum for the Degree of BEng The University offers programmes leading to the degree of BEng in the fields of Building, Civil, Computer, Electrical, Industrial, and Mechanical Engineering. Students enrolled in the BEng programme in Building Engineering may, after the completion of all but one of their 200- and 300-level courses, apply through the Associate Dean to enter a combined degree programme leading to the joint award of an undergraduate and a graduate degree in this field.

The BEng degree requires completion of a minimum of 115.5 to 120 credits depending on the programme chosen. Course requirements comprise a group of required courses with a group of elective courses which allow students to select part of their programme to provide some depth in an area of specialization according to their particular interests, or breadth in the general field of their chosen discipline.

Students may register for courses beyond the introductory 200 level only if they have completed, or will have completed in the current academic year, all of the 200-level courses required for their programme. They must complete the requirements for their degree in a maximum of four academic years after that in which they first register for courses beyond the 200 level. Students failing to satisfy this requirement are withdrawn from the programme; they may be granted permission by the Associate Dean's Office to continue in the programme for one additional year provided they are eligible to apply for readmission according to the regulations in §71.10.3. Students who fail a fall-term 200-level course which is inherent to their discipline are required to repeat it in the immediate subsequent Winter Term. In addition, students obtaining grades in the "D" range for such courses may choose to repeat them. The courses to which this regulation applies are specified annually by discipline in the Undergraduate Programme Guide.

In their final undergraduate year, students with high standing may apply for permission through the Associate Dean's Office to register for a limited number of graduate courses offered by the Faculty in lieu of some courses in the undergraduate programme.

Successful completion of a BEng programme requires hard work and considerable dedication on the part of each student. Courses are presented with the expectation of an average of about two hours of "outside" work for each lecture hour and about one-half hour of "outside" work for each hour spent in the laboratory for all programmes of study.

71.20.2 Extended Credit Programme

Students admitted to an Extended Credit Programme under the provisions of §13.3.2 or 13.8.1 must successfully complete the requirements of a specific programme, as set out in §71.30 to 71.50, plus the following courses:

a) Building, Civil, Industrial, and Mechanical Engineering:

MATH 202³, 203³, 204³, 205³

PHYS 204³, 205³, 224¹, 225¹

CHEM 205³

COMP 201³

Six credits chosen from courses in the humanities and social sciences.

Electrical and Computer Engineering: The courses specified in a), plus PHYS 2063

71.20.3 Accreditation by the Canadian Council of Professional Engineers

All Engineering programmes in the Faculty have been designed to meet the criteria of the Canadian Engineering Accreditation Board. These programmes are assessed at regular intervals according to the rules and procedures of the Board. The graduates of these programmes are thus qualified for membership in the Order of Engineers of Québec, or its equivalent in any other provincial jurisdiction, and may practise as licensed engineers according to their respective regulations.

71.20.4 Membership in the Order of Engineers of Québec

The Ordre des ingénieurs du Québec (O.I.Q.) currently admits graduates of the BEng curricula in Building, Civil, Computer, Electrical, Industrial and Mechanical Engineering, as members according to the Engineers Act and the O.I.Q. By-Laws, providing applicants can complete the French language

Québec law requires that candidates seeking admission to provincially-recognized Québec professional corporations (such as the Ordre des ingénieurs du Québec) possess an appropriate knowledge of the French language.

A person is deemed to have that knowledge who:

- has taken at least three years of full-time instruction given in French at the secondary or postsecondary level;
- has passed the French mother tongue examinations in the fourth or fifth grade of the secondary (2)level:
- has obtained in Québec, a secondary school certificate for the 1985-86 school year or later. In all other cases, a person must obtain a certificate delivered by the Office de la langue française or hold a certificate defined as equivalent by regulation of the Government.

Candidates may obtain a certificate by passing a test prescribed by the Office de la langue française. Information on this testing programme of the Office de la langue française may be obtained by writing to: Office de la langue française, 800 Place Victoria, 13è étage, C.P. 316, Montréal, Québec, H4Z 1G8, (514) 873-8361.

71.20.5 Degree Requirements To be recommended for the degree of BEng, students must satisfactorily complete the courses of the Engineering Core as well as those specified for their particular programme in subsequent sections in accordance with the graduation requirements in §71.10.5.

Credits

Engineering Core

EMAT 212	Calculus and Differential Equations	3.00
EMAT 232	Matrices and Advanced Calculus	3.00
EMAT 391	Numerical Methods in Engineering	3.00
ENCS 281	Technical Writing	2.00
ENGR 273	Basic Circuit Analysis	3.75
ENGR 371	Probability and Statistics in Engineering	3.00
ENGR 402	Engineering Law	1.50
ENGR 410(a)	Technical Report	1.50
,	Complementary Studies electives	6.00
		26.75

NOTE:

(a) Students taking BLDG 490, COEN 490 or ELEC 490 must replace ENGR 410 by ENGR 411.

Students must select three of the six Complementary Studies elective credits from List A and the remaining three from either List A or List B in §71.20.6. Students in Building Engineering must successfully complete BLDG 481 as part of the six-credit requirement. They should select the other three credits in accordance with §71.50.1. Students in Computer Engineering must successfully complete ENCS 410 as part of the six-credit requirement; they should select the other three credits from either List A or List B. Students in Civil and Industrial Engineering must successfully complete ACCO 220 as part of the six-credit requirement; they should select the other three credits from List A.

71.20.6 Complementary Studies

The professional engineer requires, in addition to technical knowledge and skills, an understanding of society, its infrastructure and needs to promote safety and preservation of the environment. To ensure that the engineer is willing and able to consider human and ecological values in all technical undertakings, engineering education should include relevant studies in humanities and the social sciences. Complementary Studies include courses in the areas of economics and management; engineering

law to respect the responsibilities and ethical principles arising from the Code of Professions as well as safety; effective communication skills to improve the ability of the student to organize and express his/her thoughts; linkage courses to identify the interaction of the engineering profession with society and to establish interdisciplinary links between the profession and public institutions in areas such as science and technology policy, environmental assessment, energy and resource strategy, safety and professional ethics; and courses in social sciences and humanities to appreciate the central issues, methodologies, and thought processes in these areas.

In addition to the required courses in Complementary Studies, included in the Engineering Core and each specific programme core, the following are prescribed electives:

List A

Social Aspects of Engineering group

		Credits
ENCS 410	Social Issues in Computers and Information Technology	3.00
ENGR 491	Engineers and Society	3.00
ENGR 492	Historical Impact of Technology on Society	3.00
ENGR 493	Engineering, Resources and Environment	3.00
ENGR 494	Effect of Technology on the Person	3.00
ENGR 495	Technology Assessment and Control	3.00
ENGR 496	Science Policy and Engineering Innovation	3.00
ENGR 497	The Management of Transition to an Information Society	3.00

List B

Prior to registering, students who do not have any specified prerequisites must obtain permission of the relevant department.

ACCO 220 Financial and Managerial Accounting 3.00 ANTH 202 Introduction to Culture 3.00 ANTH 203 Culture and Biology: An Anthropological Perspective 3.00 ANTH 204 Native Peoples of North America 3.00 ANTH 270 Anthropology and Contemporary Issues 3.00 CHEM 208 Chemical Hazards in the Work Environment 3.00 CLAS 266 An Introduction to Classical Archaeology 3.00 COMS 352 Broadcasting Policy in Canada 3.00 COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Microeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 391 Economics of the Environment 3.00 ECON 392 Langue française: niveau d'approfondissement I 3.00 FRAN 303 Langue française: niveau d'approfondissement I 3.00 FRAN 305 Communication orale 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 310 Langue française: niveau de perfectionnement I 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 416 Rédaction technique 3.00 FRAN 417 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 MATH 215 Ideas in Mathematics 3.00 MATH 216 Ideas in Mathematics 3.00 MATH 216 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy of Science 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Conceptual Revolutions in Science: Quantum Theory 3.00 POLI 275 Women and Politics 3.00			
ANTH 203 Culture and Biology: An Anthropological Perspective 3.00 ANTH 204 Native Peoples of North America 3.00 ANTH 270 Anthropology and Contemporary Issues 3.00 CHEM 208 Chemical Hazards in the Work Environment 3.00 CLAS 266 An Introduction to Classical Archaeology 3.00 COMS 352 Broadcasting Policy in Canada 3.00 COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Mocroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 391 Economics of the Environment 3.00 ECON 393 Economics of the Environment 3.00 ECON 394 Economics of the Environment 3.00 ECON 395 Natural Resource Economics 3.00 ERAN 300 Langue française: niveau d'approfondissement I 3.00 FRAN 301 Communication orale 3.00 FRAN 302 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 306 Communication écrite 3.00 FRAN 318 Le français commercial II 3.00 FRAN 319 Le français commercial II 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 415 Rédaction technique 3.00 FRAN 416 Rédaction technique 3.00 FRAN 417 Le français de la finance et de la gestion 3.00 FRAN 418 Le français de la finance et de la gestion 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 FRAN 410 Langue française: niveau de perfectionnement II 3.00 FRAN 415 Rédaction technique 3.00 FRAN 416 Resources 3.00 FRAN 417 Le français de la finance et de la gestion 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 FRAN 410	ACCO 220	Financial and Managerial Accounting	3.00
ANTH 204 Native Peoples of North America 3.00 ANTH 270 Anthropology and Contemporary Issues 3.00 CHEM 208 Chemical Hazards in the Work Environment 3.00 CLAS 266 An Introduction to Classical Archaeology 3.00 COMS 352 Broadcasting Policy in Canada 3.00 COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Macroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 391 Economics of the Environment 3.00 ECON 392 Langue française: niveau d'approfondissement I 3.00 FRAN 302 Langue française: niveau d'approfondissement II 3.00 FRAN 303 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication écrite 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial I 3.00 FRAN 319 Le française: niveau de perfectionnement I 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Longue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnemen	ANTH 202	Introduction to Culture	3.00
ANTH 270 Anthropology and Contemporary Issues CHEM 208 Chemical Hazards in the Work Environment 3.00 CLAS 266 An Introduction to Classical Archaeology 3.00 COMS 352 Broadcasting Policy in Canada 3.00 COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Macroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 396 Natural Resource Economics 3.00 FRAN 302 Langue française: niveau d'approfondissement I 3.00 FRAN 303 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 318 Le français commercial I 5RAN 319 Le français commercial I 5RAN 319 Le français commercial I 5RAN 319 Le française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 411 Le français de la technologie 3.00 FRAN 412 Le français de la technologie 3.00 FRAN 414 Le français de la finance et de la gestion 3.00 FRAN 415 Rédaction technique 3.00 FRAN 416 Rédaction technique 3.00 FRAN 417 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science PHIL 232 Introduction to Ethics 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 329 Conceptual Revolutions in Science: Space and Time 3.00			
CHEM 208 Chemical Hazards in the Work Environment 3.00 CLAS 266 An Introduction to Classical Archaeology 3.00 COMS 352 Broadcasting Policy in Canada 3.00 COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Macroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 391 Economics of the Environment 3.00 ECON 393 Langue française: niveau d'approfondissement I 3.00 FRAN 302 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 306 Communication écrite 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial I 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Space and Time 3.00	-		
CLAS 266 An Introduction to Classical Archaeology 3.00 COMS 352 Broadcasting Policy in Canada 3.00 COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Macroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 391 Economics of the Environment 3.00 ECON 392 Langue française: niveau d'approfondissement I 3.00 FRAN 302 Langue française: niveau d'approfondissement I 3.00 FRAN 303 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 411 Le français de la technologie 3.00 FRAN 412 Rédaction technique 3.00 FRAN 413 Rédaction technique 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 210 Problems of Philosophy 3.00 PHIL 210 Introduction to the Philosophy of Science 3.00 PHIL 220 Introduction to Ethics 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00			
COMS 352 Broadcasting Policy in Canada 3.00 COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Macroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 396 Natural Resource Economics 3.00 FRAN 302 Langue française: niveau d'approfondissement I 3.00 FRAN 303 Langue française: niveau d'approfondissement I 3.00 FRAN 305 Communication orale 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial I 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement I 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 MATH 215 Ideas in Mathematics 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 210 Problems of Philosophy 9 FNIL 210 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00		Chemical Hazards in the Work Environment	3.00
COMS 360 Mass Communication 3.00 COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Macroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 396 Natural Resource Economics 3.00 FRAN 302 Langue française: niveau d'approfondissement I 3.00 FRAN 303 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 318 Le français commercial I 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le française: niveau de perfectionnement I 3.00 FRAN 400 Langue française: niveau de perfectionnement II 3.00 FRAN 411 Le français de la technologie 3.00 FRAN 412 Rédaction technique 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 MATH 215 Ideas in Mathematics 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 210 Problems of Philosophy 9 Science 3.00 PHIL 210 Introduction to the Philosophy of Science 3.00 PHIL 212 Introduction to Ethics 3.00 PHIL 232 Introduction to Ethics 9.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00		An Introduction to Classical Archaeology	3.00
COMS 461 Organizational Communication 3.00 ECON 201 Introduction to Microeconomics 3.00 ECON 203 Introduction to Macroeconomics 3.00 ECON 361 Industrial Organization 3.00 ECON 391 Economics of the Environment 3.00 ECON 396 Natural Resource Economics 3.00 FRAN 302 Langue française: niveau d'approfondissement I 3.00 FRAN 303 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 306 Communication écrite 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 MATH 215 Ideas in Mathematics 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 232 Introduction in Science: Space and Time 3.00 PHIL 328 Conceptual Revolutions in Science: Quantum Theory 3.00			
ECON 201Introduction to Microeconomics3.00ECON 203Introduction to Macroeconomics3.00ECON 361Industrial Organization3.00ECON 391Economics of the Environment3.00ECON 396Natural Resource Economics3.00FRAN 302Langue française: niveau d'approfondissement I3.00FRAN 303Langue française: niveau d'approfondissement II3.00FRAN 305Communication orale3.00FRAN 306Communication écrite3.00FRAN 318Le français commercial I3.00FRAN 319Le français commercial II3.00FRAN 400Langue française: niveau de perfectionnement I3.00FRAN 401Langue française: niveau de perfectionnement II3.00FRAN 414Le français de la technologie3.00FRAN 415Rédaction technique3.00FRAN 419Le français de la finance et de la gestion3.00GEOL 203Introduction to Environmental Geology3.00GEOL 205Non-Renewable Resources3.00HIST200- and 300-level courses3.00MATH 215Ideas in Mathematics3.00PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 232Introduction to Ethics5.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00 <td></td> <td></td> <td></td>			
ECON 203Introduction to Macroeconomics3.00ECON 361Industrial Organization3.00ECON 391Economics of the Environment3.00ECON 396Natural Resource Economics3.00FRAN 302Langue française: niveau d'approfondissement I3.00FRAN 303Langue française: niveau d'approfondissement II3.00FRAN 305Communication orale3.00FRAN 306Communication écrite3.00FRAN 318Le français commercial I3.00FRAN 319Le français commercial II3.00FRAN 400Langue française: niveau de perfectionnement I3.00FRAN 401Langue française: niveau de perfectionnement II3.00FRAN 414Le français de la technologie3.00FRAN 415Rédaction technique3.00FRAN 419Le français de la finance et de la gestion3.00GEOL 203Introduction to Environmental Geology3.00GEOL 205Non-Renewable Resources3.00HIST200- and 300-level courses3.00MATH 215Ideas in Mathematics3.00PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00	COMS 461	Organizational Communication	3.00
ECON 361Industrial Organization3.00ECON 391Economics of the Environment3.00ECON 396Natural Resource Economics3.00FRAN 302Langue française: niveau d'approfondissement I3.00FRAN 303Langue française: niveau d'approfondissement II3.00FRAN 305Communication orale3.00FRAN 306Communication écrite3.00FRAN 318Le français commercial I3.00FRAN 319Le français commercial II3.00FRAN 400Langue française: niveau de perfectionnement I3.00FRAN 401Langue française: niveau de perfectionnement II3.00FRAN 414Le français de la technologie3.00FRAN 415Rédaction technique3.00FRAN 419Le français de la finance et de la gestion3.00GEOL 203Introduction to Environmental Geology3.00GEOL 205Non-Renewable Resources3.00HIST200- and 300-level courses3.00MATH 215Ideas in Mathematics3.00PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00			
ECON 391Economics of the Environment3.00ECON 396Natural Resource Economics3.00FRAN 302Langue française: niveau d'approfondissement I3.00FRAN 303Langue française: niveau d'approfondissement II3.00FRAN 305Communication orale3.00FRAN 306Communication écrite3.00FRAN 318Le français commercial I3.00FRAN 319Le français commercial II3.00FRAN 400Langue française: niveau de perfectionnement I3.00FRAN 401Langue française: niveau de perfectionnement II3.00FRAN 414Le français de la technologie3.00FRAN 415Rédaction technique3.00FRAN 419Le français de la finance et de la gestion3.00GEOL 203Introduction to Environmental Geology3.00GEOL 205Non-Renewable Resources3.00HIST200- and 300-level courses3.00MATH 215Ideas in Mathematics3.00PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00	ECON 203		3.00
ECON 396Natural Resource Economics3.00FRAN 302Langue française: niveau d'approfondissement I3.00FRAN 303Langue française: niveau d'approfondissement II3.00FRAN 305Communication orale3.00FRAN 306Communication écrite3.00FRAN 318Le français commercial I3.00FRAN 400Langue française: niveau de perfectionnement I3.00FRAN 401Langue française: niveau de perfectionnement II3.00FRAN 414Le français de la technologie3.00FRAN 415Rédaction technique3.00FRAN 419Le français de la finance et de la gestion3.00GEOL 203Introduction to Environmental Geology3.00GEOL 205Non-Renewable Resources3.00HIST200- and 300-level courses3.00MATH 215Ideas in Mathematics3.00PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00			
FRAN 302 Langue française: niveau d'approfondissement I 3.00 FRAN 303 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 306 Communication écrite 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	ECON 391		
FRAN 303 Langue française: niveau d'approfondissement II 3.00 FRAN 305 Communication orale 3.00 FRAN 306 Communication écrite 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	ECON 396	Natural Resource Economics	
FRAN 305 Communication orale 3.00 FRAN 306 Communication écrite 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 302	Langue française: niveau d'approfondissement I	3.00
FRAN 306 Communication écrite 3.00 FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 303		3.00
FRAN 318 Le français commercial I 3.00 FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 305		
FRAN 319 Le français commercial II 3.00 FRAN 400 Langue française: niveau de perfectionnement I 3.00 FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 306	Communication écrite	3.00
FRAN 400Langue française: niveau de perfectionnement I3.00FRAN 401Langue française: niveau de perfectionnement II3.00FRAN 414Le français de la technologie3.00FRAN 415Rédaction technique3.00FRAN 419Le français de la finance et de la gestion3.00GEOL 203Introduction to Environmental Geology3.00GEOL 205Non-Renewable Resources3.00HIST200- and 300-level courses3.00MATH 215Ideas in Mathematics3.00PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00	FRAN 318	Le français commercial I	3.00
FRAN 401 Langue française: niveau de perfectionnement II 3.00 FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 319	Le français commercial II	3.00
FRAN 414 Le français de la technologie 3.00 FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 400	Langue française: niveau de perfectionnement l	3.00
FRAN 415 Rédaction technique 3.00 FRAN 419 Le français de la finance et de la gestion 3.00 GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 401		3.00
FRAN 419Le français de la finance et de la gestion3.00GEOL 203Introduction to Environmental Geology3.00GEOL 205Non-Renewable Resources3.00HIST200- and 300-level courses3.00MATH 215Ideas in Mathematics3.00PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00	FRAN 414	Le français de la technologie	3.00
GEOL 203 Introduction to Environmental Geology 3.00 GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 415	Rédaction technique	3.00
GEOL 205 Non-Renewable Resources 3.00 HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	FRAN 419	Le français de la finance et de la gestion	3.00
HIST 200- and 300-level courses 3.00 MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	GEOL 203	Introduction to Environmental Geology	3.00
MATH 215 Ideas in Mathematics 3.00 PHIL 201 Problems of Philosophy 3.00 PHIL 210 Critical Thinking 3.00 PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	GEOL 205	Non-Renewable Resources	3.00
PHIL 201Problems of Philosophy3.00PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00	HIST	200- and 300-level courses	3.00
PHIL 210Critical Thinking3.00PHIL 220Introduction to the Philosophy of Science3.00PHIL 232Introduction to Ethics3.00PHIL 328Conceptual Revolutions in Science: Space and Time3.00PHIL 329Conceptual Revolutions in Science: Quantum Theory3.00	MATH 215	Ideas in Mathematics	3.00
PHIL 220 Introduction to the Philosophy of Science 3.00 PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	PHIL 201	Problems of Philosophy	3.00
PHIL 232 Introduction to Ethics 3.00 PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	PHIL 210	Critical Thinking	3.00
PHIL 328 Conceptual Revolutions in Science: Space and Time 3.00 PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	PHIL 220	Introduction to the Philosophy of Science	3.00
PHIL 329 Conceptual Revolutions in Science: Quantum Theory 3.00	PHIL 232	Introduction to Ethics	3.00
	PHIL 328	Conceptual Revolutions in Science: Space and Time	3.00
POLI 275 Women and Politics 3.00	PHIL 329	Conceptual Revolutions in Science: Quantum Theory	3.00
	POLI 275	Women and Politics	3.00

POLI 385	Environmental Issues and Policy	3.00
SCHA 203	Canadian Environmental Issues	3.00
SCHA 204	Global Environmental Issues	3.00
SCHA 250	Introduction to Science and Human Affairs I	3.00
SCHA 251	Introduction to Science and Human Affairs II	3.00
SCHA 355	Technology and Society: From Ancient Times Until 1780	3.00
SCHA 356	Technology and Society: Since 1780	3.00
SOCI 203	Introduction to Society	3.00
SOCI 220	Social Organization	3.00
SOCI 230	Race and Ethnic Relations	3.00
SOCI 261	Social Problems	3.00

71.30 DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Faculty

Chair J. CHARLES GIGUÈRE, *Professor*

Professors
M. OMAIR AHMAD
ASIM J. AL-KHALILI
AHMED K. ELHAKEEM
JEREMIAH F. HAYES
PRAVEEN K. JAIN
KHASHAYAR KHORASANI
THO LE-NGOC
EUGENE I. PLOTKIN
V. RAMACHANDRAN

Professor Emeritus STANLEY J. KUBINA

Research Professor M.N.S. SWAMY

Associate Professors
SERGE A. GRACOVETSKY
GEZA JOOS
LESLIE M. LANDSBERGER
WILLIAM E. LYNCH
MUSTAFA K. MEHMET ALI
ROBERT PAKNYS
RABIN RAUT
M.R. SOLEYMANI
CHRISTOPHER W. TRUEMAN

Assistant Professors ANJALI AGARWAL SHAHIN HASHTRUDI ZAD FERHAT KHENDEK MOHAMED NEKILI SOFIÈNE TAHAR CHUNYAN WANG

Adjunct Professors
VIJAY BHARGAVA
YAN-FEI LIU
DONALD T. McGILLIS
RAJNIKANT V. PATEL
OTTO SCHWELB
VIJAY SOOD
K. THULASIRAMAN

Adjunct Associate Professors
D. AL-KHALILI
ANADER BENYAMIN-SEEYAR
MICHEL DE CHAMPLAIN
CHRISTIAN S. GARJOUR
MUMTAZ B. GAWARGY
MICHEL KADOCH
SERDAR KALAYCIOGLU
JEAN MAHSEREDJIAN

Adjunct Assistant Professors
MAJID BARAZANDE-POUR
AMBRISH CHANDRA
JAAFAR CHERKADUI
FAYEZ HYJAZIE
G. MOSCHOPOULOS
RONGGANG QI
YOUSEF R. SHAYAN
ZIWEN YAO
JIAJUN ZHANG

Location

Sir George Williams Campus Hall Building, Room: H 961 (514) 848–3100

Department Objectives

Electrical Engineering is concerned primarily with energy and information, their conversion and transmission in the most efficient and reliable manner. This vast field of endeavour includes many specialties and Electrical Engineers may be involved in one or more of these throughout their careers. A partial list includes: electronics, integrated circuit design, very large scale integrated (VLSI) circuit design, layout and testing, controls, robotics, system simulation, telecommunications, signal processing, computer hardware design, software design, power devices, power systems, electromechanical systems, microelectromechanical devices, electromagnetics, antennas, wave guides, lasers, and optoelectronics.

Computer Engineering is the driving force of the information revolution and its transformation of society. Over the course of their careers, computer engineers will be called upon to meet a number of challenges, most of which cannot be imagined today. A partial list of current specialties includes: computer architecture, digital electronics, digital circuits, very large scale integrated (VLSI) circuit design, layout and testing, digital circuit testing and reliability, software design, software engineering, digital communication and computer networks.

The four-year programmes consist of the Engineering Core, taken by all engineering students, programme cores and electives. The Electrical Engineering Core provides a solid introduction to all aspects of the discipline, to programming methodology and to the design of large software systems. Technical electives are scheduled to enable students to register for sets of related technical courses. Current sets of electives include: Communications and Signal Processing, Computer Systems,

Electronics and VLSI, Power and Systems, and Waves and Electromagnetics. The Computer Engineering Core provides a thorough grounding in all aspects of computer hardware and software. Technical electives allow students to acquire further knowledge in various aspects of hardware or software. A mandatory final-year design project gives students in both programmes the opportunity to apply the knowledge they have acquired to the design and testing of a working prototype. Both programmes involve an extensive amount of personal computing. Students are encouraged to acquire personal computers with PentiumTM or equivalent processors. Information concerning Québec government loans for the purchase of computers is available from Concordia's Financial Aid and Awards Office.

71.30.1 Course Requirements (BEng in Electrical Engineering)

The programme in Electrical Engineering consists of the Engineering Core, the Electrical Engineering Core, and one of two options as set out below. The normal length of the programme is 119 credits.

Engineering Core (26.25 credits) See §71.20.5.

See §71.20.5.		
Electrical Engineering Core		
COEN 231	Introduction to Discrete Mathematics	3.00
COEN 243	Programming Methodology I	3.00
COEN 244	Programming Methodology II	3.00
COEN 311	Computer Organization and Software	3.00
COEN 312	Digital Systems Design I	3.75
COMP 352	Data Structures and Algorithms	3.00
ELEC 251	Fundamentals of Applied Electromagnetics	3.00
ELEC 311	Electronics I	4.50
ELEC 321	Introduction to Semiconductor Materials and Devices	3.50
ELEC 331	Fundamentals of Electrical Power Engineering	3.75
ELEC 351	Electromagnetic Waves and Guiding Structures	3.00
ELEC 361	Signals and Systems	3.00
ELEC 461	Fundamentals of Telecommunications Systems	3.75
ELEC 490	Electrical Engineering Project	4.00
EMAT 252	Complex Variables	3.00
EMAT 332	Vector Calculus and Partial Differential Equations	3.00
ENGR 370	Modelling and Analysis of Physical Systems	3.75
ENGR 372	Fundamentals of Control Systems	3.75
ENGR 401	Engineering Economics and Management Principles	1.50
		62.25
Telecommunic	ations Option	Ova elita
		Credits
COEN 320	Introduction to Real-Time Systems	3.00
COEN 445	Communication Protocols and Network Security	4.00
COMP 346	Operating Systems	4.00
ELEC 462	Digital Transmission Systems	3.75
ELEC 463	Telecommunication Networks	3.00
ELEC 471	Random Processes	3.00
ELEC 473	Overview of Communications Systems	3.00
	Elective credits chosen from list below	6.75
		30.50
	complete two of the three courses listed below.	
ELEC 464	Communications Systems Engineering	3.75
ELEC 465	Internetworking and Network Management	3.75
ELEC 472	Performance Evaluation of Telecommunication Systems	3.00
Electronics/Sys	stems Option	Credits
COEN 412	Digital Electronics	3.75
ELEC 312	Electronics II	4.50
ELEC 442	Introduction to Digital Signal Processing	3.75
	Elective credits chosen from lists below	18.50
		30.50

Electronics/Systems Electives

Students must complete a minimum of 27.5 credits chosen from any of the courses listed below. Courses are listed in groups to facilitate course selection.

Courses are list	Courses are listed in groups to facilitate course selection. Credits			
		Orcans		
ELEC 498	Topics in Electrical Engineering	3.00		
MANA 266 SOEN 282	Foundations of Modern Management Document Processing	3.00 2.00		
00LIV 202	Document 1 100033ing	2.00		
A. Communica	ations and Signal Processing			
	J	Credits		
ELEC 441	Angles Filter Design	3.75		
ELEC 441 ELEC 462	Analog Filter Design Digital Transmission Systems	3.75		
ELEC 463	Telecommunication Networks	3.00		
ELEC 471	Random Processes	3.00		
D. O	N			
B. Computer S	systems	Credits		
		o. cano		
COEN 320	Introduction to Real-Time Systems	3.00		
COEN 345 COEN 414	Software Testing and Validation Digital Systems Design II	4.00 3.75		
COEN 414 COEN 416	Computer Architecture and Design	3.00		
COEN 417	Microprocessor Systems	4.50		
COEN 420	Real-Time Systems Design	3.00		
COEN 421	Embedded Systems and Software Design	4.50		
COEN 445 COMP 346	Communication Protocols and Network Security Operating Systems	4.00 4.00		
SOEN 341	Software Process	3.00		
SOEN 342	Software Requirements and Specifications	3.00		
SOEN 343	Software Design	3.00		
O Floring 100	N/I OI			
C. Electronics	/VLSI	Credits		
		O ounc		
ELEC 411	Pulse and Waveform Generation	3.75		
ELEC 421 ELEC 422	Solid State Devices Design of Integrated Circuit Components	3.75 3.75		
ENCS 454	VLSI Design I	4.00		
ENCS 455	VLSI Design II	4.00		
ENCS 456	VLSI Process Technology	3.75		
D D 10 1				
D. Power/Syst	ems	Credits		
ELEC 431	Electrical Power Systems	3.75		
ELEC 432 ELEC 433	Control of Electrical Power Conversion Systems Power Electronics	3.75 3.75		
ENCS 245	Mechanical Analysis	3.00		
ENCS 472	Robot Manipulators	3.75		
ENGR 471	Linear Systems	3.75		
ENGR 472	System Optimization	3.75		
ENGR 473	Control System Design	3.50		
E. Waves and Electromagnetics				
	•	Credits		
ELEC 453	Microwave Engineering	3.75		
ELEC 453 ELEC 454				
	Oblical Electronics	ა,/ ა		
ELEC 455	Optical Electronics Acoustics	3.75 3.00		
ELEC 455 ELEC 456				

71.30.2 Course Requirements (BEng in Computer Engineering) The programme in Computer Engineering consists of the Engineering Core, the Computer Engineering Core, and one of the two options as set out below. The normal length of the programme is 119.5 credits.

Engineering Core: (26.25 credits)

See §71.20.5

Computer Engineering Core

		Credits
COEN 231 COEN 243 COEN 244 COEN 311 COEN 312 COEN 417 COEN 445 COEN 490 COMP 346 COMP 352 ELEC 311 ELEC 353 ELEC 361 EMAT 252 ENGR 370 ENGR 372 ENGR 401 SOEN 341	Introduction to Discrete Mathematics Programming Methodology I Programming Methodology II Computer Organization and Software Digital Systems Design I Microprocessor Systems Communication Protocols and Network Security Computer Engineering Project Operating Systems Data Structures and Algorithms Electronics I Basic Electromagnetics and Transmission Line Theory Signals and Systems Complex Variables Modelling and Analysis of Physical Systems Fundamentals of Control Systems Engineering Economics and Management Principles Software Process	Credits 3.00 3.00 3.00 3.00 3.75 4.50 4.00 4.00 4.00 3.00 3.00 3.00 3.75 3.75 1.50 3.00
SOEN 341	Software Process	60.75

System Hardware Engineering Option

•		Credits
COEN 412	Digital Electronics	3.75
COEN 414	Digital Systems Design II	3.75
COEN 416	Computer Architecture and Design	3.00
ELEC 461	Fundamentals of Telecommunications Systems	3.75
ENCS 454	VLSI Design I	4.00
	Electives chosen from the lists below	14.25

32.50

System Software Engineering Option

•,••••		Credits
COEN 320	Introduction to Real-Time Systems	3.00
COEN 345	Software Testing and Validation	4.00
COEN 420	Real-Time Systems Design	3.00
COEN 421	Embedded Systems and Software Design	4.50
COMP 353	Databases	4.00
SOEN 282	Document Processing	2.00
SOEN 342	Requirements and Specifications	3.00
SOEN 343	Software Design	3.00
	Electives chosen from the lists below	6.00
		32.50

Electives to complete option requirements may be chosen from the first list and/or from the list appropriate to the option.

Both Options

		Credits
COEN 498	Topics in Computer Engineering	3.00
COMP 471	Computer Graphics	4.00
COMP 472	Artificial Intelligence	4.00
COMP 474	Introduction to Expert Systems	4.00
ELEC 442	Introduction to Digital Signal Processing	3.75

ENCS 245 ENCS 472	Mechanical Analysis Robot Manipulators	3.00 3.75
ENGR 471	Linear Systems	3.75
MANA 266	Foundations of Modern Management	3.00
SOEN 344	Software Architecture	4.00
System Hardwa	re Engineering Option	
		Credits
00EN 000	later dusting to Deal Time Contains	0.00
COEN 320	Introduction to Real-Time Systems	3.00
COEN 345	Software Testing and Validation	4.00
COEN 420	Real-Time Systems Design	3.00
COEN 421	Embedded Systems and Software Design	4.50
COMP 353	Databases	4.00
ELEC 312	Electronics II	4.50
ELEC 462	Digital Transmission Systems	3.75
ELEC 463	Telecommunication Networks	3.00
ELEC 471	Random Processes	3.00
ENCS 455	VLSI Design II	4.00
SOEN 282 SOEN 342	Document Processing	2.00 3.00
SOEN 342 SOEN 343	Requirements and Specifications	3.00
30EN 343	Software Design	3.00
System Softwar	re Engineering Option	
.,		Credits
COEN 412	Digital Electronics	3.75
COEN 414	Digital Systems Design II	3.75
COEN 416	Computer Architecture and Design	3.00
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 442	Compiler Design	3.00
COMP 451	Database Design	3.00
COMP 465	Design and Analysis of Algorithms	3.00
ELEC 461	Fundamentals of Telecommunications Systems	3.75
SOEN 357	User Interface Design	4.00
SOEN 431	Formal Methods	3.00
SOEN 448	Management of Evolving Systems	3.00
SOEN 449	Component Engineering	3.00
SOEN 475	Imaging and Visualization	3 00

71.30.3 The Co-operative Format Director

SOEN 475

CHRISTOPHER W. TRUEMAN, Associate Professor

Imaging and Visualization

Students entering the programme leading to the BEng degree in Electrical or Computer Engineering may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular programme, but seven Study terms are interspersed with four Work terms. Students in Electrical or Computer Engineering will complete between 15.75 and 18.25 credits in each Study Term to obtain the required number of credits for a BEng (Electrical or Computer).

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Electrical and Computer Engineering co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

3.00

71.40 DEPARTMENT OF MECHANICAL ENGINEERING

Faculty

Chair SUONG VAN HOA, Professor

Professors
A.K. WAIZUDDIN AHMED
R.B. BHAT
M. NABIL ESMAIL
W.G. HABASHI
SUBHASH RAKHEJA
GEORGIOS H. VATISTAS

Professors Emeriti RICHARD M.H. CHENG SUI LIN HUGH J. MCQUEEN M.O.M. OSMAN

Associate Professors
AKIF ASIL BULGAK
MINGYUAN CHEN
WAHID S. GHALY
GERARD J. GOUW
KALMAN I. KRAKOW
VOJISLAV LATINOVIC
RAFIK A. NEEMEH
ION STIHARU
J. SVOBODA
XINRAN XIAO

Assistant Professors SAMIR AMIOUNY KUDRET DEMIRLI R. GANESAN ELIZA M. HASEGANU HENRI HONG JOSEPH PEGNA MARTIN PUGH C.Y. SU

Limited Term Appointment GREGOR ROHRAUER

Adjunct Professors ADOLF E. BLACH RAO V. DUKKIPATI VIRENDRA JHA DAVID P. KENNY

Adjunct Associate Professors
F. DOUGLAS HAMBLIN
H. MOUSTAPHA
N. RYAN
GARY WAGNER
CHUNG Y. WU
S. YEUNG

Adjunct Assistant Professors
PAUL-ÉMILE BOILEAU
A. GEORGANTAS
GRANT GUEVREMONT
ASHOK KAUSHAL
N. KROUGLICOFF
M. ROBICHAUD
W. YAN

Consultant to Industrial Engineering Programme LOUISE QUESNEL

Location

Sir George Williams Campus Hall Building, Room: H 549 (514) 848-3131

Department Objectives

The Department of Mechanical Engineering offers two distinct undergraduate programmes, one leading to the BEng in **Mechanical Engineering**, the other to the BEng in **Industrial Engineering**. Mechanical Engineering is concerned with all forms of power generation (hydro-electric, steam, internal combustion, nuclear, jet rocket, and fuel cells), the design of mechanisms and machines, transportation systems, controls and automation, vibration analysis, environmental control (heating, ventilation, and refrigeration), materials handling, and precision measurement. The Mechanical Engineering curriculum consists of a combination of core courses with a series of technical electives that allow students to obtain some specialization in a particular area of the field depending on their interests and expected future professional activity. Four options are available: Thermo Fluid and Propulsion Engineering; Design and Manufacturing Engineering; Automation and Control Systems; and Aerospace and Vehicle Systems.

Industrial Engineering is concerned with the design, organization, analysis, and integration of people and industrial systems components in order to achieve or enhance effectiveness. These components include whole machines, transportation and conveyance elements, physical plant, organizational frameworks, schedules, and budgets. The Industrial Engineering curriculum is therefore designed to give students the background needed to define and solve problems related to the conception, improvement, integration, and implementation of industrial systems.

71.40.1 Course Requirements (BEng in Mechanical Engineering) The programme in Mechanical Engineering consists of the Engineering Core, the Mechanical Engineering Core, and option requirements as shown below. The minimum length of the programme is 120 credits.

Engineering Core (26.75 credits)

See §71.20.5

Mechanical Engineering Core

Wechanical E	inglineering Core	Credits
EMAT 311 ENGR 242 ENGR 243 ENGR 244 ENGR 251 ENGR 361 ENGR 370 ENGR 372 ENGR 401 MECH 211 MECH 215 MECH 216 MECH 221 MECH 311 MECH 313 MECH 351 MECH 351 MECH 352 MECH 361 MECH 372 MECH 373 MECH 373 MECH 441 MECH 443 MECH 443 MECH 443 MECH 440	Transform Calculus and Partial Differential Equations Statics Dynamics Mechanics of Materials Thermodynamics I Fluid Mechanics I Modelling and Analysis of Physical Systems Fundamentals of Control Systems Engineering Economics and Management Principles Mechanical Engineering Drawing Programming for Mechanical and Industrial Engineers I Programming for Mechanical and Industrial Engineers II Materials Science Manufacturing Processes Machine Drawing and Design Properties and Failure of Materials Theory of Machines I Thermodynamics II Heat Transfer I Fluid Mechanics II Industrial Electronics Instrumentation and Measurements Mechanical Engineering Design Mechanical Vibrations Capstone Mechanical Engineering Design Project	3.00 3.00 3.00 3.75 3.00 3.75 3.75 1.50 3.00 3.00 3.50 3.50 3.50 3.50 3.50 3
		80.25

Option Requirements

Students in the Mechanical Engineering programme must complete at least 13 elective credits from one of options A, B, C, or D. Prior to registration for elective courses, students indicate their choice of option on a form available from the Department, which must be submitted to the Chair's office for approval *prior to March 15*.

1. Option A — Thermo Fluid and Propulsion

Students must complete a minimum of 13 credits from the following courses, with at least two of the three courses marked *.

		Credits
ENGR 460 ENGR 473 ENGR 475 ELEC 334 MECH 413 MECH 421 MECH 422 MECH 423 MECH 424 MECH 446 MECH 452* MECH 453 MECH 454 MECH 454 MECH 454 MECH 461* MECH 462*	Finite Element Analysis Control System Design Process Dynamics and Control Electric Machinery Theory of Machines II Mechanical Shaping of Metals and Plastics Mechanical Behaviour of Polymer Composite Materials Casting, Welding, Heat Treating, and Non-Destructive Testing Design and Fabrication of Micromachines and Micromechanisms Process Equipment Design Heat Transfer II Heating, Ventilation and Air Conditioning Systems Vehicular Internal Combustion Engines Gas Dynamics Turbomachinery and Propulsion	3.75 3.50 3.75 3.75 3.50 3.50 3.50 3.50 3.50 3.50 3.50 3.5
MECH 462 MECH 464	Aerodynamics	3.00

MECH 465	Gas Turbine Design	3.50
MECH 471	Microprocessors and Applications	3.50
MECH 498	Topics in Mechanical Engineering	3.00

2. Option B — Design and Manufacturing

Students must complete a minimum of 13 credits from the following courses, with at least one of the two courses marked *.

		Credits
ENGR 460	Finite Element Analysis	3.75
ENGR 473	Control System Design	3.50
ELEC 334	Electric Machinery	3.75
INDU 323	Industrial Operations Research	3.00
INDU 410	Safety Engineering	3.50
INDU 411*	Computer Integrated Manufacturing	3.50
MECH 412*	Computer-Aided Mechanical Design	3.50
MECH 413	Theory of Machines II	3.50
MECH 421	Mechanical Shaping of Metals and Plastics	3.50
MECH 422	Mechanical Behaviour of Polymer Composite Materials	3.00
MECH 423	Casting, Welding, Heat Treating, and Non-Destructive Testing	3.50
MECH 424	Design and Fabrication of Micromachines and Micromechanisms	3.50
MECH 425	Manufacturing of Composites	3.50
MECH 426	Stress and Failure Analysis of Machinery	3.00
MECH 431	Principles of Aeroelasticity	3.00
MECH 444	Guided Vehicle Systems	3.00
MECH 446	Process Equipment Design	3.00
MECH 447	Fundamentals of Vehicle System Design	3.00
MECH 453	Heating, Ventilation and Air Conditioning Systems	3.00
MECH 463	Fluid Power Control	3.50
MECH 471	Microprocessors and Applications	3.50
MECH 498	Topics in Mechanical Engineering	3.00

3. Option C — Automation and Control Systems

Students must complete a minimum of 13 credits from the following courses, with at least two of the three courses marked *.

Credits

Linear Systems	3.75
System Optimization	3.75
Control System Design	3.50
Process Dynamics and Control	3.75
Electric Machinery	3.75
Industrial Operations Research	3.00
Theory of Machines II	3.50
Mechanical Behaviour of Polymer Composite Materials	3.00
Design and Fabrication of Micromachines and Micromechanisms	3.50
Guided Vehicle Systems	3.00
Process Equipment Design	3.00
Fundamentals of Vehicle System Design	3.00
Heating, Ventilation and Air Conditioning Systems	3.00
Fluid Power Control	3.50
Microprocessors and Applications	3.50
Topics in Mechanical Engineering	3.00
	System Optimization Control System Design Process Dynamics and Control Electric Machinery Industrial Operations Research Theory of Machines II Mechanical Behaviour of Polymer Composite Materials Design and Fabrication of Micromachines and Micromechanisms Guided Vehicle Systems Process Equipment Design Fundamentals of Vehicle System Design Heating, Ventilation and Air Conditioning Systems Fluid Power Control Microprocessors and Applications

4. Option D — Aerospace and Vehicle Systems

Students must complete a minimum of 13 credits from the following courses, with at least two of the four courses marked *.

Tour oourood ma		Credits
ENGR 460	Finite Element Analysis	3.75
ENGR 473	Control System Design	3.50
MECH 412	Computer-Aided Mechanical Design	3.50
MECH 413	Theory of Machines II	3.50
MECH 422	Mechanical Behaviour of Polymer Composite Materials	3.00
MECH 424	Design and Fabrication of Micromachines and Micromechanisms	3.50
MECH 425	Manufacturing of Composites	3.50
MECH 426	Stress and Failure Analysis of Machinery	3.00

MEOU 447* Fundamentals of Valida Ocatana Danima
MECH 447* Fundamentals of Vehicle System Design 3.00
MECH 448* Vehicle Dynamics 3.00
MECH 454 Vehicular Internal Combustion Engines 3.00
MECH 461 Gas Dynamics 3.50
MECH 462 Turbomachinery and Propulsion 3.00
MECH 463 Fluid Power Control 3.50
MECH 464* Aerodynamics 3.00
MECH 471 Microprocessors and Applications 3.50
MECH 480* Flight Control Systems 3.00
MECH 481 Materials Engineering for Aerospace 3.00
MECH 482 Avionic Navigation Systems 3.00
MECH 498 Topics in Mechanical Engineering 3.00

NOTE: A student of one option is allowed to select a maximum of one elective course from the list of courses for other options.

71.40.2 Course Requirements (BEng in Industrial Engineering) The programme in Industrial Engineering consists of the Engineering Core, the Industrial Engineering Core and 9.5 elective credits as shown below. The normal length of the programme is 119.75 credits.

Engineering Core (26.75 credits)

See §71.20.5

Note: Students are required to take ACCO 220 — Financial and Managerial Accounting (3.00 credits) as a List B Complementary Studies elective.

Industrial Engineering Core

industrial Eng	meering Core	Credits
EMAT 311 ENGR 242 ENGR 243 ENGR 244 ENGR 251 ENGR 361 ENGR 370 ENGR 372 INDU 211 INDU 311 INDU 313 INDU 320 INDU 320 INDU 372 INDU 411 INDU 412 INDU 421 INDU 431	Transform Calculus and Partial Differential Equations Statics Dynamics Mechanics of Materials Thermodynamics I Fluid Mechanics I Modelling and Analysis of Physical Systems Fundamentals of Control Systems Introduction to Production and Manufacturing Systems Simulation of Industrial Systems Industrial Economics Production Engineering Industrial Operations Research Engineering Management Quality Control and Reliability Computer Integrated Manufacturing Human Factors Engineering Facilities Design and Material Handling Systems Inventory Control Capstone Industrial Engineering Design Project Mechanical Engineering Drawing Programming for Mechanical and Industrial Engineers I Programming for Mechanical and Industrial Engineers II Materials Science Manufacturing Processes Machine Drawing and Design	3.00 3.00 3.00 3.75 3.00 3.75 3.75 3.00 3.50 3.00 3.00 3.00 3.00 3.00 3.0
WEON 010	Washing and Design	83.50

Electives

Students must complete a minimum of 9.5 credits from the following courses, including at least two of the courses marked *.

ENGR 472 System Optimization	3.75 3.75 3.50

INDU 471* Stochastic Models in Industrial Engineering 3.00 INDU 475* Advanced Concepts in Quality Improvement 3.00 INDU 498* Topics in Industrial Engineering 3.00 MECH 321 Properties and Failure of Materials 3.50 MECH 372 Industrial Electronics 3.50 MECH 373 Instrumentation and Measurements 3.50 MECH 412 Computer-Aided Mechanical Design 3.50 MECH 421 Mechanical Shaping of Metals and Plastics 3.50 MECH 422 Mechanical Behavior of Polymer Composite Materials 3.00 MECH 423 Casting, Welding, Heat Treating, and Non-Destructive Testing 3.50 MECH 425 Manufacturing of Composites 3.50 MECH 431 Principles of Aeroelasticity 3.00 MECH 453 Heating, Ventilation and Air Conditioning Systems 3.00 MECH 463 Fluid Power Control 3.50	INDU 471* INDU 475* INDU 498* MECH 321 MECH 372 MECH 412 MECH 421 MECH 421 MECH 422 MECH 423 MECH 425 MECH 431 MECH 453 MECH 463	Stochastic Models in Industrial Engineering Advanced Concepts in Quality Improvement Topics in Industrial Engineering Properties and Failure of Materials Industrial Electronics Instrumentation and Measurements Computer-Aided Mechanical Design Mechanical Shaping of Metals and Plastics Mechanical Behavior of Polymer Composite Materials Casting, Welding, Heat Treating, and Non-Destructive Testing Manufacturing of Composites Principles of Aeroelasticity Heating, Ventilation and Air Conditioning Systems Fluid Power Control	3.00 3.00 3.00 3.00 3.50 3.50 3.50 3.50
			3.50 3.50

71.40.3 The Co-operative Format

Director GERARD J. GOUW, Associate Professor

Students entering the programme leading to the BEng degree in Mechanical or Industrial Engineering may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular programme, but seven Study terms are interspersed with four Work terms. Students in Mechanical or Industrial Engineering will normally complete between 14 and 20.25 credits in each Study Term to obtain the required 120 credits for a BEng (Mechanical) and 119.75 credits for a BEng (Industrial).

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Mechanical and Industrial Engineering co-op committee, which includes the student's advisers.

Please refer to $\S 24$ for the schedule of Study and Work terms and the full description of admission requirements.

71.50 DEPARTMENT OF BUILDING, CIVIL AND ENVIRONMENTAL

Faculty

Chair OSAMA MOSELHI, Professor

Associate Chair T.B.A.

Professors CLAUDE BÉDARD PAUL P. FAZIO RICHARD WILLIAM GUY **FARIBORZ HAGHIGHAT** KINH HA-HUY

ADEL M. HANNA OSCAR A. PEKAU

HORMOZ B. POOROOSHASB AMRUTHUR S. RAMAMURTHY THEODORE STATHOPOULOS ZENON A. ZIELINSKI

Professors Emeriti DOREL FELDMAN CEDRIC MARSH MICHAEL S. TROITSKY

Associate Professors SABAH ALKASS BALA ASHTAKALA ANDREAS K. ATHIENITIS MAMDOUH M. EL-BADRY MARIA ELEKTOROWICZ MOHAMMED ZAHEERUDDIN

RADU ZMEUREANU

Assistant Professors CATHERINE MULLIGAN **HUGUES RIVARD**

Lecturer

DOMINIQUE DEROME

Adjunct Professors M. BOMBERG H. KEIRA C. ZHANG

Adjunct Associate Professors

W. BAJJALI R. BALACHAMDAR B.L. CARBALLADA R. CHARETTE S. GAMATI V. GOCEVSKI H. LUCHIAN PATRICK SAATHOFF

D. TRAN

Adjunct Assistant Professors

M. ABDEL-RAHMAN V. BATTA M. BERJAOUI R. CHIFRINA

A. NOORZAD HANQING WU

Location

Sir George Williams Campus Department of Building, Civil and Environmental Engineering, Room: BE 341

(514) 848-3200 (514) 848-7800

Objectives

Building Engineering, as a discipline, encompasses the body of knowledge which pertains to all phases in the life-cycle of a constructed facility, namely conception, planning, design, construction, operation, and disposal.

Concordia has a unique undergraduate programme leading to a BEng in Building Engineering designed to meet the needs of the construction industry for engineers familiar with the overall design of built facilities.

In addition to the basic engineering sciences, the programme emphasizes the fundamentals of building materials, structural analysis and design, building services (acoustical, heating, lighting, air conditioning), economics, and project management. The student also has available certain electives which will be of use in the design of various phases of a building.

Students who complete all but one of their 200- and 300-level courses with a sufficiently high standing may apply through the Associate Dean, Student Affairs to enter a combined programme leading to the joint award of both a BEng and an MEng degree in Building Engineering. It is expected that those who aspire to leadership roles within the building industry will enter such a combined programme. The combined programme requires a further 12 months of full-time study, after which graduates will not only have obtained further grounding in the basics, but will also have specialized in one of four branches: Building Science, Building Environment, Building Structures, Construction Management. For details of the graduate component, refer to the School of Graduate Studies Calendar.

71.50.1 Course Requirements

The programme in Building Engineering consists of the Engineering Core, the Building Engineering Core, and a further nine elective credits chosen from a specified group of courses. The normal length of the programme is 119.75 credits.

Engineering Core (26.75 credits)

See §71.20.5. Students in BEng (Bldg) must successfully complete BLDG 481 as one of the required Complementary Studies courses. Students in the BEng (Bldg) programme are encouraged to take one of the following courses from List A — Social Aspects of Engineering: ENGR 491 (Engineers and Society); ENGR 493 (Engineering, Resources and Environment); or ENGR 495 (Technology Assessment and Control).

Building Eng	Credits	
EMAT 332	Vector Calculus and Partial Differential Equations	3.00
ENGR 231	Computer Applications in Building and Civil Engineering	3.00
ENGR 232	Programming for Building and Civil Engineers I	2.00
ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00
ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 342	Structural Analysis I	2.00
ENGR 343	Structural Analysis II	3.00
ENGR 344	Structural Design I	3.00
ENGR 345	Structural Design II	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 451	Construction Engineering	3.00
BLDG 212	Building Engineering Drawing	3.00
BLDG 341	Building Engineering Systems	3.00
BLDG 365	Building Science	3.50
BLDG 366	Acoustics and Lighting	3.50
BLDG 371	Building Service Systems	3.50
BLDG 401	Building Economics	3.00
BLDG 459	Computer-Aided Building Design	3.00
BLDG 463	Building Envelope Design	3.00
BLDG 471	HVAC System Design	4.00
BLDG 476	Thermal Analysis of Buildings	3.00
BLDG 490	Capstone Building Engineering Design Project	4.00
CIVI 271*	Surveying	3.00
CIVI 321	Engineering Materials	3.75
CIVI 432	Soil Mechanics	3.50
		84.50

^{*}Summer course to be taken before entering second year of BEng programme.

Elective Courses

A student must choose a minimum of nine credits from the following list of elective courses.

		Credits
ENGR 331	Programming for Building and Civil Engineers II	3.00
ENGR 452	Matrix Analysis of Structures	3.00
ENGR 455	Introduction to Structural Dynamics	3.00
BLDG 462	Modern Building Materials	3.00
BLDG 465	Fire and Smoke Control in Buildings	3.00
BLDG 472	Building Energy Conservation Technologies	3.00
BLDG 473	Building Acoustics	3.00
BLDG 474	Building Illumination	3.00
BLDG 475	Indoor Air Quality	3.00
BLDG 477	Control Systems in Buildings	3.00
BLDG 478	Project Management for Construction	3.00
BLDG 491	Labour and Industrial Relations in Construction	3.00
BLDG 492	Construction Processes	3.00
BLDG 493	Legal Issues in Construction	3.00
BLDG 498	Topics in Building Engineering	3.00
CIVI 435	Foundation Design	3.50
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50

Objectives

Civil Engineering is concerned with the creation of systems of constructed facilities which play an important role in sound economic growth of society. It is also concerned with the development of technologies to combat pollution of air, water, and soil. Civil engineers are responsible for the design of foundations and superstructures of common structures such as buildings, bridges, dams, tunnels, wharves, as well as many unusual structures such as rocket installations, containment vessels for nuclear reactors, supports for radio telescopes, frameworks for aircraft. In addition, they are concerned with the engineering aspects of water resources; transportation facilities; planning metropolitan areas, and conducting and managing their public facilities. In dealing with environmental problems, civil engineers perform vital functions such as monitoring and controlling air, water, and soil quality, assessing the impact of technological changes on the environment, and developing innovative waste reduction technologies.

71.50.2 Course Requirements

The programme in Civil Engineering consists of the Engineering Core, the Civil Engineering Core, and one of the options described below. The normal length of the programme is 117 credits.

Engineering Core (26.75 credits)

Students in the BEng (Civil) programme must take ACCO 220 as one of the Complementary Studies courses. See §71.20.5.

Civil Engineering Core		Credits
EMAT 332 ENGR 231 ENGR 232 ENGR 242 ENGR 243 ENGR 244 ENGR 251 ENGR 342 ENGR 343 ENGR 344 ENGR 345 ENGR 361 ENGR 401 ENGR 451 CIVI 212 CIVI 231 CIVI 271*	Vector Calculus and Partial Differential Equations Computer Applications in Building and Civil Engineering Programming for Building and Civil Engineers I Statics Dynamics Mechanics of Materials Thermodynamics I Structural Analysis I Structural Analysis II Structural Design I Structural Design II Fluid Mechanics I Engineering Economics and Management Principles Construction Engineering Civil Engineering Drawing Geology Surveying	3.00 3.00 2.00 3.00 3.00 3.75 3.00 2.00 3.00 3.00 3.00 3.00 3.00 3.00
CIVI 321	Engineering Materials	3.75
CIVI 341 CIVI 361	Civil Engineering Systems Introduction to Environmental Engineering	3.00 3.50
CIVI 372 CIVI 381 CIVI 382 CIVI 432	Transportation Engineering Hydraulics Water Supply and Waste-Water Engineering Soil Mechanics	3.00 3.50 3.50 3.50
		71.75

^{*}Summer course to be taken before entering second year of BEng programme.

Option Course Requirements

Students must complete a minimum of 12.50 credits from one of Option A or Option B and with at least six additional credits from either option. Option A is designed for students interested in careers in structural, geotechnical, and transportation engineering. Option B is tailored for students wishing to pursue careers in environmental engineering.

	Option A – General	Credits
ENGR 452	Matrix Analysis of Structures	3.00
ENGR 455	Introduction to Structural Dynamics	3.00
CIVI 435	Foundation Design	3.50
CIVI 437	Advanced Geotechnical Engineering	3.00
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50
CIVI 471	Highway and Pavement Design	3.50
CIVI 474	Transportation Planning and Design	3.00

Option B – Environmental

	Option B – Environmental	Credits
CIVI 464	Environmental Impact Assessment	3.00
CIVI 465	Water Pollution and Control	3.50
CIVI 466	Engineering Aspects of Chemical and Biological Processes	3.00
CIVI 467	Air Pollution and Emission Control	3.00
CIVI 468	Waste Management	3.00
CIVI 469	Geo-Environmental Engineering	3.50
CIVI 483	Hydrology	3.50
CIVI 489	Computational Hydraulics	3.50

71.50.3 The Co-operative Format Director

RADU ZMEUREANU, Associate Professor

Students entering the programme leading to the BEng degree in Building or Civil Engineering may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular programme, but seven Study terms are interspersed with four Work terms. Students in Building or Civil Engineering will complete between 15 and 18 credits in each Study Term to obtain the required 119.75 or 117 credits for a BEng (Building or Civil, respectively).

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Building and Civil Engineering co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

71.60 ENGINEERING COURSE DESCRIPTIONS

ENGINEERING MATHEMATICS

EMAT 212 Calculus and Differential Equations (3 credits)

Prerequisite: MATH 204 (cégep Mathematics 105) previously or concurrently; MATH 205 (cégep Mathematics 203). Introduction to ordinary differential equations with applications to engineering problems. Functions of several variables: differentiation and multiple integrals. Lectures: three hours per week. Tutorial: two hours per week.

EMAT 232 Matrices and Advanced Calculus (3 credits)

Prerequisite: EMAT 212 previously or concurrently. Review of matrix algebra; solution of systems of linear differential equations with examples drawn from physical systems; vector spaces, characteristic value problems, Cayley-Hamilton theorem with applications. Vector calculus: gradient, divergence, Curl, Green's theorem. Divergence theorem, Stokes theorem. Lectures: three hours per week. Tutorial: two hours per week.

EMAT 252 Complex Variables (3 credits)
Prerequisite: EMAT 212; EMAT 232 previously
or concurrently. Algebra of complex numbers in
Cartesian and polar forms; functions and inverse
functions of complex variables. Derivatives and
Cauchy-Riemann, analytic and harmonic functions. Exponential, trigonometric, hyperbolic, and
logarithmic functions. Complex line integrals,
Cauchy-Goursat theorem, Cauchy integral formula. Taylor's and Laurent's series. Residue theorem
and applications. Lectures: three hours per week.

EMAT 311 Transform Calculus and Partial Differential Equations (3 credits)

Prerequisite: EMAT 232. Elements of complex variables. The Laplace transform: Laplace transforms and their properties, solution of linear differential equations with constant coefficients. Further theorems and their applications. The Fourier transform: orthogonal functions, expansion of a function in orthogonal functions, the Fourier series, the Fourier integral, the Fourier transform, the convolution theorem. Partial differential equations: physical foundations of partial differential equations, introduction to boundary value problems. Lectures: three hours per week.

EMAT 332 Vector Calculus and Partial Differential Equations (3 credits)

Prerequisite: EMAT 232. Review of vector calculus. Partial differential equations. Boundary value problems. Separation of variables. Fourier series solutions in one and two dimensions. Laplace and Poisson equations. One- and two-dimensional

wave equations in orthogonal coordinate systems. Scalar and vector potentials and fields. Examples from heat flow, electrostatics and magnetostatics. Bessel and Legendre functions. Power series solutions; method of Frobenius. Applications: vibrating string, vibrating membrane in rectangular and cylindrical coordinates. Sturm-Liouville problem. Eigenvalues and eigenfunctions. Lectures: three hours per week. NOTE: Students who have received credit for EMAT 312 may not take this course for credit.

EMAT 391 Numerical Methods in Engineering (3 credits)

Prerequisite: EMAT 232; COMP 212 or COEN 243 or MECH 216. Roots of algebraic and transcendental equations; function approximation; numerical differentiation; numerical integration; solution of simultaneous algebraic equations; numerical integration of ordinary differential equations. Lectures: three hours per week. Tutorial: one hour per week.

ENGINEERING AND COMPUTER SCIENCE

ENCS 245 Mechanical Analysis (3 credits)
Prerequisite: PHYS 204 and PHYS 224 (cégep
Physics 101); EMAT 212 previously or
concurrently. Forces in a plane and in space,
moments of forces, Varignon's theorem, rigid
bodies in equilibrium, free-body diagram.
Centroids, centres of gravity. Distributed forces,
moments of inertia. Principle of virtual work.
Kinematics of particles and rigid bodies. Forces
and accelerations; work and energy; impulse
and momentum. Kinetics of particles and rigid
bodies. Lectures: three hours per week.
Tutorial: one hour per week.

ENCS 281 Technical Writing (2 credits)
Technical writing form and style. Technical and scientific papers, abstracts, reports. Library research and referencing methods. Business communications. Students may be required to attend tutorial writing workshops based on the results of placement tests administered at the start of the course. Lectures: two hours per week. Tutorial: two hours per week.

ENCS 410 Social Issues in Computers and Information Technology (3 credits)

Prerequisite: ENCS 281; SOEN 341. Characteristics of information technology; end-user computing; cyberspace applications. Social issues, including differences between software engineering and other engineering disciplines. Security, privacy, and accountability. Moral, ethical, and legal issues. Impact of computer technology on individuals and social groups: life, work, leisure, and interactions. Conflicts and trade-offs; lessons from history. Lectures: three hours per week.

ENCS 454 VLSI Design I (4 credits) Prerequisite: COEN 312 or COMP 327; ELEC 311. Review of IC development and realization of logic elements. CMOS inverter, logic levels, power and speed considerations, area of implementation. Electrical analysis using SPICE, input, output, delay time and loading. CMOS NAND/NOR gates, fan-out limitations, and layout considerations. Simple CMOS process, design rules, and layout exercises. CMOS logic system design and analysis using SPLICE. Logic simulation and testing specification of input, output, and delay for fault simulation. Other CAD facilities for logic simulation and testing. Gate arrays and semi-custom CMOS design considerations. CMOS dynamic VLSI circuits; CMOS memories. NMOS dynamic and static circuit design: NMOS memories. Hierarchical approach to digital design of VLSI circuits. Lectures: three hours per week. Laboratory: two hours per week.

VLSI Design II (4 credits) Prerequisite: ENCS 454. Hardware description language (VHDL). Modelling with VHDL and Verilog. Synthesis techniques. Behavioural and RTL synthesis. Programmable logic, Devices (PLD), synthesis with PLD. Applications. Lectures: three hours per week. Laboratory: two hours per week.

ENCS 456 VLSI Process Technology (3.75 credits)

Prerequisite: ELEC 311, 321. Introduction to basic VLSI technologies; crystal growth, thermal oxidation, diffusion, ion implantation, chemical vapour deposition, wet and dry etching, and lithography. Layout, yield, and VLSI process integration. The lab demonstrates a semiconductor device fabrication process. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENCS 472 Robot Manipulators

(3.75 credits)

Prerequisite: ENGR 372. Spatial descriptions and transformations. Manipulator forward and inverse kinematics. Jacobians: velocities and static forces. Manipulator dynamics. Trajectory generation. Position control of manipulators. Force control of manipulators. Robot programming languages. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGINEERING

ENGR 231 Computer Applications in **Building and Civil Engineering** (3 credits)

Prerequisite: MATH 204 (cégep Mathematics 105); COMP 201. Application of computers for solution of problems from various areas of

building and civil engineering that involve the use of software including high-level scripting languages, spreadsheets, databases and CAD systems. Programme structure and development: specifications, analysis of requirements, flow charting, incremental development, testing, validation and programme documenting. Lectures: two hours per week. Laboratory: two hours per week.

ENGR 232 Programming for Building and Civil Engineers I (2 credits)

Prerequisite: ENGR 231. Elements of procedural programming: variables, primitive data types, scope, operators and expressions, control structures, functions, derived data types and basic data structures. Use of numerical tool box for engineering applications. Application examples and assignments will be drawn from building and civil engineering science. Lectures: two hours per week. Tutorial: one hour per week.

ENGR 242 Statics (3 credits)

Prerequisite: EMAT 212 previously or concurrently; PHYS 204 and PHYS 224 (cégep Physics 101); MATH 204 (cégep Mathematics 105). Resultant of force systems; equilibrium of particles and rigid bodies; distributed forces; statically determinate systems; trusses; friction; moments of inertia; virtual work. Shear and bending moment diagrams. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 243 Dynamics (3 credits)

Prerequisite: EMAT 212; ENGR 242. Kinematics of a particle and rigid body; forces and accelerations; work and energy; impulse and momentum; dynamics of a system of particles and rigid bodies, introduction to vibrations. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 244 Mechanics of Materials (3.75 credits)

Prerequisite: ENGR 242; EMAT 232 previously or concurrently. Mechanical behaviour of materials; stress; strain; shear and bending moment diagrams; introduction to inelastic action. Analysis and design of structural and machine elements subjected to axial, torsional, and flexural loadings. Combined stresses and stress transformation. Deflections. Introduction to elastic stability. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

ENGR 251 Thermodynamics I (3 credits) Prerequisite: MATH 203 (cégep Mathematics 103). Basic principles of thermodynamics and their application to various systems composed of pure substances and their homogeneous non-reactive mixtures. Simple power production and utilization cycles. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 273 Basic Circuit Analysis (3.75 credits)

Prerequisite: EMAT 212 previously or concur-

rently; PHYS 205 previously; PHYS 225 previously or concurrently or cégep Physics 201. Units: current, voltage, power, and energy. Elementary wave-forms. Time averages. Ohm's law. KVL and KCL. Ideal sources. Mesh and node analysis of resistive circuits. Network theorems. Inductors and capacitors and their response to the application of elementary waveforms. Transient response of simple circuits. Natural frequency and damping. Initial conditions. Steady state AC analysis: resonance, impedance, power factor. Introduction to three phase power, delta and Y connections. Ideal operational amplifiers. Ideal transformers. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

ENGR 331 Programming for Building and Civil Engineers II (3 credits)

Prerequisite: ENGR 232. Fundamentals of object-oriented programming: class definition, data and function members, constructors and destructors; derived classes; inheritance, polymorphism, class libraries; concepts of software engineering. Project on software design for building and civil engineering applications. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 342 Structural Analysis I (2 credits) Prerequisite: ENGR 244 previously or concurrently. Analysis of statically determinate structures: deflections, strain energy concepts, virtual work principles. Mueller Breslau principle, influence lines. Approximate methods for statically indeterminate structures. Collapse load analysis. Computer applications. Lectures: two hours per week. Tutorial: one hour per week.

ENGR 343 Structural Analysis II (3 credits) Prerequisite: ENGR 342. Analysis of statically indeterminate structures: the methods of consistent deformations, slope deflection, and moment distribution. Application of virtual work principles. Introduction to matrix methods. Computer applications. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 344 Structural Design I (3 credits) Prerequisite: ENGR 342 previously or concurrently. Basis for limit states design. Code requirements. Structural steel design: tension and compression members, beams and beamcolumns. Connections. Introduction to the design of timber members. Lectures: two hours per week. Laboratory: two hours per week.

Structural Design II (3 credits) **ENGR 345** Prerequisite: ENGR 342 previously or concurrently. Reinforced concrete behaviour in flexure. compression, shear, and bond. Ultimate strength design of reinforced concrete beams, columns, walls, and footings. Introduction to prestressed concrete and masonry. Lecture: two hours per week. Laboratory: two hours per week.

ENGR 361 Fluid Mechanics I (3 credits) Prerequisite: EMAT 212, 232; ENGR 251. Basic concepts and principles of fluid mechanics. Classification of fluid flow. Hydrostatic forces on plane and curved surfaces, buoyancy and stability, fluids in rigid body motion. Mass, momentum, and energy conservation integral equations. Bernoulli equation. Basic concepts of pipe and duct flow. Introduction to Navier-Stokes equations. Similarity and model studies. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 370 Modelling and Analysis of Physical Systems (3.75 credits)

Prerequisite: EMAT 311 or ELEC 361 previously or concurrently; ENGR 273. Definition and classification of physical systems. Definition of through and across variables. Modelling of system components: electrical, mechanical, fluid, and thermal. Limits of linear models and linear representations of nonlinear components. Modelling of systems including mixed systems. Analysis techniques: review of first and second order systems; mesh and nodal analysis in the Laplace transform domain; impedance and transfer functions; two-port parameters; indefinite admittance matrix; signal flow graphs; identification of analysis techniques used for SPICE. Fundamentals of frequency response: introduction to filters; Butterworth and Chebyshev filter functions. Introduction to state variable analysis. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

NOTE: Students who have received credit for ENGR 274 or ELEC 341 may not take this course for credit.

ENGR 371 Probability and Statistics in **Engineering** (3 credits)

Prerequisite: EMAT 232. Axioms of probability theory. Events. Conditional probability. Bayes theorem. Random variables. Mathematical expectation. Discrete and continuous probability density functions. Transformation of variables. Probabilistic models, statistics, and elements of hypothesis testing (sampling distributions and interval estimation). Introduction to statistical quality control. Applications to engineering problems. Lectures: three hours per week.

ENGR 372 Fundamentals of Control Systems (3.75 credits)

Prerequisite: ENGR 370. Mathematical models of control systems. Characteristics, performance. and stability of linear feedback control systems. Root-locus methods. Frequency response methods. Stability in the frequency domain. Design and compensation of feedback control systems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGR 401 Engineering Economics and Management Principles

(1.5 credits)

Prerequisite: ENGR 371. This course is presented in relation to the practice of

engineering and includes the following topics: role and activities of the manager. Enterprises and organizations; organizational modes. Planning and control; principles and practice of decision-making. Interest and the time value of money; expected value and decision trees. Capital expenditure appraisal, discounted cash flow, and other methods. Sensitivity analysis. Lectures: one and a half hours per week. NOTE: Students who have received credit for ENGR 403 may not take this course for credit.

ENGR 402 Engineering Law (1.5 credits) Prerequisite: BLDG 401 or ENGR 401 or INDU 313 previously or concurrently. The application of Québec laws such as those pertaining to property, to engineers and related professionals; the extent of right of ownership and restrictions thereon, including legal and conventional servitudes, usufruct, building and zoning by-laws; civil responsibility and contracts generally with emphasis on engineering and construction contracts, standard clauses and rights and duties of the parties. Health and safety regulations in the construction industry and the jurisdiction of various tribunals. Corporations — responsibilities of directors and officers. Employment contracts and agency. A review of the relevant provisions of the Québec Professional Code and the Engineers Act. A delegate from l'Ordre des Ingénieurs du Québec gives two lectures explaining the structure and scope of the professional organization and especially professional ethics. Lectures: one and a half hours per week.

ENGR 410 Technical Report (1.5 credits) Prerequisite: ENCS 281. Students in the BEng programme must submit a technical report on entering their final year. The report must be from 2,000 to 5,000 words long, on a topic closely related to the student's discipline. The report must present a review of a current engineering problem, a proposal for a design project, or a current engineering practice; a student's summer work may provide a suitable basis. Students are responsible for acquiring a complete set of instructions and the document Form and Style in the spring before entering the final year of the BEng programme. These documents are available from the Office of Student Affairs of the Faculty.

NOTE 1: Students must discuss their proposed topic with a faculty member in their Department, and obtain departmental approval of the proposed topic prior to registration for the course.

NOTE 2: Students in the Mechanical and Industrial Engineering programmes must take this course concurrently with MECH 490 or INDU 490 respectively.

NOTE 3: Students in the Software Engineering programme must take this course concurrently with SOEN 490.

NOTE: Students who have received credit for ENGR 411 may not take this course for credit.

Project Technical Report **ENGR 411**

(1 credit)

Prerequisite: ENCS 281; one of BLDG 490, COEN 490, ELEC 490, INDU 490 taken concurrently. Students in the BEng programme must submit a project report associated with their final-year project course. While a portion of the requirements for the written report will depend on the associated project course for which the student is registered, the report should also conform to the set of instructions available through the departmental offices or the Office of Student Affairs of the Faculty.

NOTE: Students who have received credit for ENGR 410 may not take this course for credit.

ENGR 451 Construction Engineering (3 credits)

Prerequisite: BLDG 341 or CIVI 341. The nature of construction and the environment in which the industry works; organizational structures for project delivery; construction contracts and documents; introduction to construction processes: excavation and site works, foundation layout, concrete form design, concrete, steel, timber, and masonry construction; project planning, scheduling, and control; construction safety. Lectures: three hours per week.

ENGR 452 Matrix Analysis of Structures (3 credits)

Prerequisite: EMAT 232; ENGR 343. Classical and matrix methods of structural analysis; influence coefficients, transformation matrices. Matrix formulation of the force and of the displacement methods of analysis. Direct stiffness approach; sub-structure technique. Introduction to finite-element method. Computer applications. Lectures: three hours per week.

ENGR 455 Introduction to Structural **Dynamics** (3 credits)

Prerequisite: EMAT 391; ENGR 243, 342. Theory of vibration. Dynamic response of simple structural systems. Effects of blast, wind, traffic, and machinery vibrations. Basic concepts in earthquake resistant design. Computer applications. Lectures: three hours per week.

ENGR 460 Finite Element Analysis (3.75 credits)

Prerequisite: EMAT 391; ENGR 244 or ENCS 245. Formulation and application of the finite element method to modelling of engineering problems, including stress analysis, vibrations, and heat transfer. Examples illustrating the direct approach, as well as variational and weighted residual methods. Elements and interpolation functions. Meshing effect. Error analysis. One- and two-dimensional boundary value problems. Development of simple programmes and direct experience with general purpose packages currently used in industry for design problems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGR 471 Linear Systems (3.75 credits)

Prerequisite: ENGR 372. Review of matrix algebra. State-space description of dynamic systems: linearity, causality, time-invariance, linearization. Solution of state-space equations. Transfer function representation. Discrete-time models. Controllability and observability. Canonical forms and minimal-order realizations. Stability. Stabilizability and pole placement. Linear quadratic optimal control. Observer design. Lectures: three hours per week, alternate weeks.

ENGR 472 System Optimization (3.75 credits)

Prerequisite: EMAT 391. Linear least squares. Properties of quadratic functions with applications to steepest descent method, Newton's method and Quasi-Newton methods for non-linear optimization. One-dimensional optimization. Introduction to constrained optimization, including the elements of Kuhn-Tucker conditions for optimality. Least pth and mini-max optimization. Application of optimization techniques to engineering problems. Lectures: three hours per week, Laboratory: three hours per week, alternate weeks.

ENGR 473 Control System Design (3.5 credits)

Prerequisite: ENGR 372. A course in industrial control design procedures by case study, including practical sensing, control, and actuating elements; optimization of system performance by choice of components and compensation; nonlinearites, introduction to multi-loop systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

ENGR 475 Process Dynamics and Control (3.75 credits)

Prerequisite: ENGR 372. Dynamics of mechanical and chemical processes; system capacity; resistance; piping complexes; characteristics and dynamics of control valves; process time constants; proportional, reset, and derivative control actions; feedforward and cascade control; direct digital control. Case studies on liquid-level control, temperature, and heat exchanger control. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

SOCIAL ASPECTS OF ENGINEERING

ENGR 491 Engineers and Society (3 credits)

Prerequisite: ENCS 281, 20 courses in BEng programme. Sociological analysis of the interaction between the engineering profession and society, the development of the profession, growth of technical societies, trends in engineering and engineering technology education, relationship to other professions. Role of engineers in Canadian industry, government, and industrial research. Lectures: three hours per week.

ENGR 492 Historical Impact of Technology on Society (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng programme. Social history of technology and of science including ancient and medieval periods, industrial revolution, and modern times. Engineering and scientific creativity, social and environmental problems created by uncontrolled technology, appropriate technology. Lectures: three hours per week.

ENGR 493 Engineering, Resources and Environment (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng programme. Sources, consequences and control of air, water, noise, solid, and radiation pollution. Management of mineral and energy resources. Conservation of resources through engineering efficiency, recycling, and communal practices. Renewable resources. Case studies of engineering projects. Lectures: three hours per week.

ENGR 494 Effect of Technology on the Person (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng programme. Psychological effects of various technologies. Changes in personal, family, and community values arising from various patterns of industrial development. Enhancement of personal development by technology, adaptation of the machine to humanity. Lectures: three hours per week.

ENGR 495 Technology Assessment and Control (3 credits)

Prerequisite: ENCS 281, 20 courses in BEng programme. The organization of mechanisms and institutions to control and mediate the unwanted and unanticipated side-effects of contemporary technology. Environmental impact assessment, analysis of industrial health and safety, risk analysis. Technological forecasting, future studies, appropriate technology, the conserver society. Relationships of technology assessment to science policy, resource planning, and energy strategy. Lectures: three hours per week.

ENGR 496 Science Policy and Engineering Innovation (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng programme. An analysis of the basic concepts in science and technology policy, including the allocation of resources; research and development; invention, innovation, and diffusion. The social impact of policy decisions and the structure and programmes of government organizations involved in the field. Of particular concern will be issues such as foreign ownership; science and technology development within a regional context; the role of government, industry, and the universities within a balanced science and technology policy. Lectures: three hours per week.

ENGR 497 The Management of Transition to an Information Society

(3 credits)

Prerequisite: ENCS 281; 20 courses in BEng

programme. Understanding the social role of the new technologies of the information machine, the emerging information society, the rate of adoption of new technologies, the implications of the information machines for global societies. The effects of the new technology on the structure of decision-making process. Lectures: three hours per week.

BUILDING ENGINEERING

BLDG 212 Building Engineering Drawing (3 credits)

Fundamentals of technical drawing, dimensioning practices, orthographic projections, auxiliary and sectional views of buildings. Theory and applications of descriptive geometry in building design. Computer-aided building drawing. Building sub-systems and related graphics standards; architectural and building engineering drawing at preliminary and final stages. Introduction to the design of light-frame buildings. Project: representation of a building and its sub-systems. Lectures: two hours per week. Laboratory: two hours per week. Tutorial: one hour per week. NOTE: Students who have received credit for BLDG 211 may not take this course for credit.

BLDG 341 Building Engineering Systems (3 credits)

Prerequisite: COMP 212; EMAT 232 previously or concurrently. Introduction to systematic solution of building engineering problems. Techniques treated include linear programming, network analysis, nonlinear programming. Introduction to decision analysis and simulation. Application of optimization methods for solution of design problems in building science, building environment, building structures, and construction management. Lectures: three hours per week.

BLDG 365 Building Science (3.5 credits) Prerequisite: ENGR 251: ENGR 361 previously or concurrently. General introduction to the thermal environment. Topics include heat, temperature, one-dimensional steady-state processes. Convection: natural and forced. Radiation. Combined radiative and convective surface transfer. Psychrometrics. Thermal comfort. Air quality. Condensation: surface and interstitial. Introduction to compressible viscous flow, friction, and flow in pipes; boundary layer and wind effects. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks. NOTE: Students who have received credit for BLDG 364 may not take this course for credit.

BLDG 366 Acoustics and Lighting (3.5 credits)

Prerequisite: ENGR 243. General introduction to the aural and visual environment. Psychological impact of environment. Subjective and objective scales of measurement. Introduction to vibration. The hearing mechanism. Transmission of sound, passive control of noise in buildings, transmission loss, absorption and reverberation time. Room

acoustic assessment. Active control of the aural environment. Visual perception. Photometry, brightness, luminance, and illumination. Concept of natural lighting in building. Artificial lighting; light sources; luminaries. Calorimetry. Calculation methods for artificial lighting. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks. NOTE: Students who have received credit for BLDG 363 may not take this course for credit.

BLDG 371 Building Service Systems (3.5 credits)

Prerequisite: BLDG 365. Principles of building service systems, including electrical, gas, communications, service-water supply and distribution; introduction to plans, codes, and standards for utility distribution systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

BLDG 401 Building Economics (3 credits) Prerequisite: BLDG 341 previously or concurrently. Development of economic performance measures of interest to developers, owners, contractors, and users. Sources of finance and the determinants of the cost of money. Treatment of life cycle costing, economic risk; tax regulation, inflation, forecasting techniques; model building, cost indices, elemental estimating, computerized information systems. Consideration of economic analyses of projects, single buildings, and building components. Lectures: three hours per week.

Computer-Aided Building **BLDG 459** Design (3 credits)

Prerequisite: BLDG 341; BLDG 401 previously or concurrently. Building engineering design process: methodology, identification of objectives, building codes, formulation of design problems. Development and evaluation of design alternatives. Conceptual building design: spatial requirements, design of space layout. Preliminary building design: synthesis and design of structures, enclosure systems, and services (HVAC, lighting, electrical distribution) using computer-aided design tools. Performance evaluation using modelling, sensitivity analysis and cost estimation. A major design project is an integral part of this course. Lectures: three hours per week.

BLDG 462 Modern Building Materials (3 credits)

Prerequisite: CIVI 321. Engineering properties of building materials such as: plastics, synthetic fibres, adhesives, sealants, caulking compounds, foams, sandwich panels, composites, polymer concrete systems, fibre-reinforced concretes, plastic mortars, polymers for flooring, roofing, synthetic wall papers. Their structural, thermal, and acoustical properties. Consideration of corrosion, bio- and thermal-degradation, stability to ultraviolet and solar radiation. Laboratory sessions to illustrate synthesis, application, testing, deterioration, and protection. Lectures: three hours per week.

BLDG 463 Building Envelope Design (3 credits)

Prerequisite: BLDG 365; CIVI 321. Technical influences in the design of building envelope, including the control of heat flow, air and moisture penetration, building movements, and deterioration. Application of air/vapour barrier and rain-screen systems. Performance assessment and building codes through case studies and design projects. Design of walls, roofs, joints and assemblies. Cause of deterioration and preventive measures, on-site investigation. Relevant building codes and standards. Lectures: three hours per week.

NOTE: Students who have received credit for BLDG 461 may not take this course for credit.

BLDG 465 Fire and Smoke Control in Buildings (3 credits)

Prerequisite: BLDG 365, 366. Topics treated include fire and smoke control; failure mechanisms of building enclosure illustrated by case studies; code requirements for enclosure systems; systems approach for fire safety. Lectures: three hours per week.

BLDG 471 HVAC System Design (4 credits) Prerequisite: BLDG 371; BLDG 476 previously or concurrently. Principles of HVAC system design and analysis; component and system selection criteria including room air distribution, fans and air circulation, humidifying and dehumidifying processes, piping and ducting design. Air quality standards. Control systems and techniques; operational economics; computer applications. Lectures: three hours per week. Laboratory: two hours per week.

BLDG 472 Building Energy Conservation Technologies (3 credits)

Prerequisite: BLDG 471 previously or concurrently. Standards of energy efficiency in buildings. Trends in energy consumption. Energy audit: evaluation of energy performance of existing buildings, weather normalization methods, measurements, disaggregation of total energy consumption, use of computer models, impact of people behaviour. Energy efficiency measures in buildings: approaches, materials and equipments, operating strategies, evaluation methods of energy savings. Renewable energy sources: passive or active solar systems, geothermal systems, free-cooling. Optimum selection of energy sources. Impact of emerging technologies. Case studies. Lectures: three hours per week.

BLDG 473 *Building Acoustics* (3 credits) Prerequisite: BLDG 363. Noise control criteria and regulations, instrumentation, noise sources, room acoustics, walls, barriers and enclosures, acoustical materials and structures, vibration and noise control systems for buildings. Lectures: three hours per week.

BLDG 474 *Building Illumination* (3 credits) Prerequisite: BLDG 363. Production, measurement and control of light, design of lighting

systems. Design in respect to daylighting. Integration of lighting systems with mechanical systems. Lectures: three hours per week.

BLDG 475 Indoor Air Quality (3 credits)
Prerequisite: BLDG 371 previously or concurrently. Elements of indoor air quality, physical/chemical characteristics of contaminants, health effects, standard requirements. Estimation of the levels of indoor air contaminants in buildings. Design of ventilation systems for pollutant control. Air pollution due to outdoor air supply through ventilation systems. Effect of outdoor air pollution on indoor air quality. Lectures: three hours per week.

BLDG 476 Thermal Analysis of Buildings (3 credits)

Prerequisite: BLDG 364. Two- and three-dimensional steady-state and transient conductive heat transfer together with convection and radiation as applied to building materials and geometries. Heating and cooling load analysis, including building shapes, construction type, solar radiation, infiltration, occupancy effects, and daily load variations. Computer applications for thermal load analysis. Introduction to heat exchangers. Lectures: three hours per week.

BLDG 477 Control Systems in Buildings (3 credits)

Prerequisite: BLDG 371 previously or concurrently. Introduction to automatic control systems. Control issues related to energy conservation, indoor air quality and thermal comfort in buildings. Classification of HVAC control systems. Control system hardware: selection and sizing of sensors, actuators and controllers. Practical HVAC control systems; elementary local loop and complete control systems. Designing and tuning of controllers. Building automation systems. Case studies. Lectures: three hours per week.

BLDG 478 Project Management for Construction (3 credits)

Prerequisite: BLDG 341. Introduction to project management techniques in construction, including project delivery methods, construction contracts, cost estimating and bidding planning and scheduling, cash flow analysis, project tracking and control, computer applications. Lectures: three hours per week.

BLDG 481 Architectural Appreciation and Design (3 credits)

Prerequisite: 20 courses in the BEng programme. Historical and modern architectural theories. Meaning, intentions, and formal issues in contemporary design. The influence of technology, energy conservation, and environmental constraints on built form. Architecture vs. industrial design. Lectures: three hours per week.

BLDG 490 Capstone Building Engineering Design Project (4 credits)

Prerequisite: Final-year standing in the BEng (Bldg) programme or permission of the Depart-

ment; ENGR 411 concurrently. The project of each team will encompass the integrated design of at least three sub-systems of a new or retrofitted building to achieve high performance and efficiency at reasonable cost. In the process, students will learn, through case studies and literature survey, the information gathering and decision/design process, problem-resolution as well as aspects related to management, teamwork and communication. Students registering for this course must contact the course coordinator for the detailed procedure. Lectures: two hours per week, two terms.

BLDG 491 Labour and Industrial Relations in Construction (3 credits)

Prerequisite: ENGR 451. The study of labour legislation with special emphasis on the construction industry, union organization, the theory and practice of negotiations, mediation, contract administration, and arbitration. Review of actual contracts, discussion of future trends. Lectures: three hours per week.

BLDG 492 Construction Processes (3 credits)

Prerequisite: ENGR 451. A study of current construction methods and techniques. The subjects include site preparation and earthwork, wood framing, masonry, concrete forming, slip forming, precast construction, industrialized building, deep excavation shoring and underpinning. Design, erection, and removal of temporary construction work. Current field practice and safety considerations. Site visits. Lectures: three hours per week.

BLDG 493 Legal Issues in Construction (3 credits)

Prerequisite: ENGR 451. Legal concepts and processes applicable to the development of constructed facilities and to the operation of the construction firm. Emphasis on Québec law and institutions. Lectures: three hours per week.

BLDG 498 Topics in Building Engineering (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Department. The course content may vary from offering to offering and will be chosen to complement the available elective courses. Lectures: three hours per week.

CIVIL ENGINEERING

CIVI 212 Civil Engineering Drawing (3 credits)

Fundamentals of technical drawing, dimensioning practice, orthographic projections, auxiliary and sectional views. Theory and applications of descriptive geometry in civil engineering. Computeraided drawing and applications to the preparation of working drawing of steel and concrete structures. Lectures: two hours per week. Tutorial: one hour per week. Laboratory: two hours per week. NOTE: Students who have received credit for CIVI 211 may not take this course for credit.

CIVI 231 Geology (2.75 credits) Basic principles of physical and structural geology with emphasis on topics related to civil engineering, study of minerals, rocks and soil types, load formation, techniques of air-photo interpretations, and geological maps. Lectures: two hours per week. Laboratory: three hours per week, alternate weeks.

CIVI 271 Surveying (3 credits)

Elementary operations employed in engineering surveying; use, care, and adjustment of instruments; linear and angular measurements; traversing; earthwork calculations; theory of errors; horizontal and vertical curves and curve layout; slope stakes and grades, application of surveying methods to city, topographic surveying, and introduction to advanced surveying techniques; use of digital computers in surveying calculations. Summer school taken before entering second year of study in the BEng programme. Lectures and fieldwork: eight hours per day; six days per week for three weeks.

CIVI 321 Engineering Materials (3.75 credits)

Linear and nonlinear material behaviour, timedependent behaviour; structural and engineering properties of structural metals; behaviour of wood; production and properties of concrete; bituminous materials, ceramics, plastics; introduction to composite materials. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

CIVI 341 Civil Engineering Systems (3 credits)

Prerequisite: ENGR 371 previously or concurrently; COMP 212. Development of concepts and techniques commonly associated with systems engineering which are applicable to design and operation of systems that concern civil engineers. Design and planning process; problem formulation, optimization concepts, linear programming, decision analysis; system simulation; network planning and project scheduling; computer applications. The techniques developed are used to solve problems in transportation, water resources, structures, and construction management. Lectures: three hours per week.

CIVI 361 Introduction to Environmental Engineering (3.5 credits)

Prerequisite: ENGR 361. Ecosystems considerations, food chain, natural decomposition, and recycling; environmental problems and impact of engineering activities. Various modes of pollution, water, air, and soil contamination, noise pollution; pollution measurement and quantification. Water and waste-water physical, chemical and biological characteristics; turbidity and colour, dissolved oxygen, hardness, pH, alkalinity, organic content, sampling and analysis, chemical and biochemical oxygen demand. Basic processes of treatment: flocculation and coagulation, sedimentation, filtration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 372 Transportation Engineering (3 credits)

Prerequisite: CIVI 341. Fields of transportation engineering; transportation's roles in society; planning and design of road, rail, air, and waterway system components: terminals, right-of-way; control systems: evaluation of alternative modes and decision-making process; introduction to computer-aided design and management of systems. Lectures: three hours per week. Tutorial: one hour per week.

CIVI 381 *Hydraulics* (3.5 credits)
Prerequisite: ENGR 361. Basic hydrodynamics; boundary layer theory, principle of energy losses. Steady flow in open channel; uniform flow, specific energy and critical flow, transition; non-uniform flow, water surface profiles, computer applications. Flow measurement in open channel, weirs, overflow spillways. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 382 Water Supply and Waste-Water Engineering (3.5 credits)

Prerequisite: CIVI 381; EMAT 391. Characteristics of water and waste water. Water use cycle; population forecast, water demands. Sources of waters, surface water, ground water, water quantities and requirements. Water supply network analysis, design of distribution systems, storage, pumping. Sanitary and storm water quantities, urban hydrology. Design of sewer systems, interceptors, gravity sewers, computer applications. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 432 Soil Mechanics (3.5 credits)
Prerequisite: ENGR 244. Index properties and classification of soils. Weight-volume relationships. Soil structures. Moisture-density relationships. Permeability, deformation, and strength of soils. Principle of total and effective stresses. Steady stage seepage through isotropic soil media. Stress distribution due to external loads and analysis of total settlements. Outline of theory of consolidation. Fundamentals of stability of earth retaining walls, slopes, and footings. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for CIVI 431 may not take this course for credit.

CIVI 435 Foundation Design (3.5 credits)
Prerequisite: CIVI 432. Loads, bearing capacity,
and settlement. Lateral pressures. Foundation
drainage and water-proofing. Spread footings.
Strip footings. Pile foundations. Caissons. Retaining walls. Sheet-piling walls. Braced cofferdams.
Cellular cofferdams. Anchors. Lectures: two hours
per week. Laboratory: three hours per week.

CIVI 437 Advanced Geotechnical Engineering (3 credits)

Prerequisite: CIVI 432. Mechanical properties of rocks and rock formations. Underground openings in rocks. Slope stability of stratified formations.

Foundations on rocks. Rock bolting. Introduction of soil dynamics. Wave propagation in one and two dimensions in elastic media. Seismic waves. Foundations subjected to dynamic loading. Theory of liquefaction. Lectures: three hours per week.

CIVI 453 Design of Reinforced Concrete Structures (3.5 credits)

Prerequisite: ENGR 343, 345. Design of long columns, columns subjected to biaxial bending, two-way slabs, flat plates, girders, and shells. Design of frames, shear-walls, and prefabricated structures. Prestressed concrete: losses, short-and long-term deflections; design requirements for shear, flexure, bond, and anchorage. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 454 Design of Steel Structures (3.5 credits)

Prerequisite: ENGR 343, 344. Trends and developments in structural-steel design. Framing systems. Floor systems; composite construction; plate girders. Design of braced frames, moment-resisting frames. Connections. P-Delta effects. Introduction to steel-bridge design. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 464 Environmental Impact Assessment (3 credits)

Prerequisite: CIVI 361. Engineering activities and the environment; environmental ethics. Prediction and estimation of impact on air, water, soil quality, and biological, socioeconomic, cultural environments. Water and air pollution laws, solid and hazardous waste laws. Environmental inventories, assessment preparation, and review. Federal and provincial laws and regulations on environmental assessment. Strategies for environmental compliance, resolution of environmental conflicts. Case studies. Lectures: three hours per week.

CIVI 465 Water Pollution and Control (3.5 credits)

Prerequisite: CIVI 361. Physical, chemical, and biological characteristics of water, water quality standards, reaction kinetics and material balances, eutrophication. Containment of reactive contaminants. Natural purification processes in water systems, adsorption, absorption; diffusion and dispersion, oxidation. Large-scale transport of contaminants, single and multiple source models; modelling of transport processes, computer simulation. Introduction to groundwater pollution, sea-water intrusion. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 466 Engineering Aspects of Chemical and Biological Processes (3 credits)

Prerequisite: CIVI 361. Introduction to water purification, chemical treatment, coagulation, disinfection, special purification methods. Primary and secondary waste-water treatment,

solution and surface chemistry, microbiological consideration; reaction kinetics, diffusion processes, membrane processes, re-aeration. Biological treatment, activated sludge process, treatment and disposal; biological reactors; aerated lagoons; trickling filter; biological nutrient removal. Tertiary waste-water treatment. Lectures: three hours per week.

CIVI 467 Air Pollution and Emission Control (3 credits)

Prerequisite: CIVI 361. Types of air pollutants. Sources of air pollutants, effects of air pollutants on health, vegetation, materials, and the atmosphere; emission standards. Meteorological considerations, dispersion of pollutants in the atmosphere, distribution and cleansing of particle matter, atmospheric photochemical reactions. Particulate pollutant control, source correction, cooling treatment; control of gaseous pollutant, point sources, odour control; measurement techniques; computer applications. Lectures: three hours per week.

CIVI 468 Waste Management (3 credits) Prerequisite: CIVI 361. Solid waste; source and generation, sampling and analysis, collection, transport, and storage. Waste recycling, physical and chemical reduction; drying; energy recovery; disposal of solid waste. Sanitary and secure landfill planning, site selection, design and operation; chemical and biological reactions. Hazardous waste, chemical and physical characteristics, handling, processing, transportation, and disposal. Resource recovery alternatives, material exchanges, hazardous waste management facilities, incinerators, landfills. Lectures: three hours per week.

CIVI 469 Geo-Environmental **Engineering** (3.5 credits)

Prerequisite: CIVI 361. Structure and surface chemistry of soil, ion exchange, hydrolysis equilibrium, adsorption. Biochemical degradation, toxic contaminants. Mechanical and thermodynamic equilibrium in soil. Geotechnical considerations in environmental design; soil decontamination. Barrier technologies and soil interaction. Landfill covers and leachate collection systems; subsurface investigation, soil-gas survey. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 471 Highway and Pavement Design (3.5 credits)

Prerequisite: CIVI 271, 372. Design criteria, including capacity and level of service; route alignment and right-of-way considerations; geometric design; earthworks and construction practices. Pavement materials and tests; design of flexible and rigid pavements; pavement management. Computer applications. Geometric and pavement design projects. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 474 Transportation Planning and **Design** (3 credits)

Prerequisite: CIVI 372. Transportation planning

process; data collection and demand analysis; trip generation, trip distribution, modal split and route assignment; forecasting travel patterns. Design of transportation facilities: street sections, intersections, and parking areas. Computer applications and design projects. Lectures: three hours per week. Tutorial: two hours per week, alternate weeks.

CIVI 483 Hydrology (3.5 credits) Prerequisite: CIVI 381. Weather elements; precipitation, stage-discharge relations; evapo-transpiration; ground-water flow; streamflow hydrography, unit hydrography, synthetic hydrographs; laminar flow; hydrologic routing; instantaneous hydrograph; hydraulic routing, method of characteristics, kinematic routing; statistical analysis, confidence intervals, stochastic generator, autoregressive model; applications of hydrology. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 489 Computational Hydraulics (3.5 credits)

Prerequisite: CIVI 381. Continuous and discrete forms of conservation laws; mass, momentum, and energy in one-, two- and three-dimensional forms; St. Venant and Boussinesg equations; numerical methods; finite differences, implicit and explicit schemes; finite elements; application to engineering and environmental hydraulics; computer applications. Lectures: two hours per week. Laboratory: three hours per week.

COMPUTER ENGINEERING

COEN 231 Introduction to Discrete Mathematics (3 credits)

Prerequisite: MATH 204 (cégep Mathematics 105). Fundamental principles of counting: rules of sum and product; permutations, arrangements and combinations, the binomial theorem: combinations with repetition: distributions. Fundamentals of logic: basic connectives and truth tables; logical equivalence; the laws of logic; logical implication; rules of inference; the use of quantifiers; proofs of theorems. Sets: the laws of set theory. Boolean algebra. Relation of Boolean algebra to logical and set theoretic operations. Modulo arithmetic: representations of numbers in binary, octal and hexadecimal formats; binary arithmetic. Induction and recursion: induction on natural numbers; recursive definitions. Functions and relations: cartesian products and relations; functions; function composition and inverse functions; computational complexity. Elements of graph theory: basic definitions of graph theory; paths, reachability and connectedness; computing paths from their matrix representation; traversing graphs represented as adjacency lists; trees and spanning trees. Lectures: three hours per week. Tutorial: one hour per week.

COEN 243 Programming Methodology I (3 credits)

Prerequisite: COEN 231 previously or concur-

rently. Computer Systems: computer organization, evolution of operating systems, programming languages and paradigms. Software Development Process: algorithms, pseudocode and control structures, primitive data types, operators, statements, flowcharts and structured programming. Module- and Procedure-oriented Programming: procedures (or methods), packages, scope rules, recursion vs. iteration, arrays, multiple-subscribed arrays, references, parameters, sorting and searching arrays. Object-Based Programming: abstract data type with class, class scope, package and object creation, constructors, selectors, modifiers, finalizers, self reference, class members, data abstraction and information hiding. Introduction to object-oriented programming concepts: superclasses, subclasses, inheritance relationship, composition vs. inheritance, polymorphism, dynamic binding, abstract and concrete classes. Lectures: three hours per week. Tutorial: one hour per week. NOTE: Students who have received credit for COMP 248 may not take this course for credit.

COEN 244 Programming Methodology II (3 credits)

Prerequisite: COEN 243. Review of objectoriented programming and further concepts. Strings and Characters. Fundamentals of file and stream processing. Event-based programming: Basic GUI; event-listener; mouse, keyboard, button and action events; layout managers. Exception handling: error-handling techniques, try/catch blocks. Pointers vs. References. Addressing and indirection. Arrays and pointers. Character string processing. Dynamic data types: Revisiting new/delete. Implicit and explicit instantiations. Inheritance. Polymorphism. Templates: function templates, class templates, standard template library; containers and iterators. Abstract base classes. Virtual functions. Namespaces. Case study of a medium scale OO project: simplified analysis and design. Lectures: three hours per week. Tutorial: one hour per week. NOTE: Students who have received credit for COMP 249 may not take this course for credit.

COEN 311 Computer Organization and Software (3 credits)

Prerequisite: COEN 243, 312 previously or concurrently. Introduction and terminology. Overview of the functional units and the operation of a computer. Machine programming fundamentals: instruction structure, addressing modes, the assembly process, examples of architectures. Case study of a microprocessor architecture: programming model, assembler and addressing modes, instruction set and formats; programming examples. Stacks, subroutines, macros, exceptions, interrupts. Programme and interrupt driven I/O. Memory management. Introduction to system software: system kernel, system services, assemblers, compilers, linkers and loaders, user-level view of operating systems. Lectures: three hours per week.

COEN 312 Digital Systems Design I (3.75 credits)

Prerequisite: COEN 231. Logic gates and their use in the realization of Boolean algebra statements; logic minimization, multiple output circuits. Designing with MSI and LSI chips, decoders, multiplexers, adders, multipliers, programmable logic devices. Introduction to sequential circuits; flip-flops. Completely specified sequential machines. Machine equivalence and minimization. Implementation of clock mode sequential circuits. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

COEN 320 Introduction to Real-Time Systems (3 credits)

Prerequisite: COMP 346. Fundamentals of real-time systems (RTS) and principles of current real-time operating systems (RTOS). Focus on timeliness. Characteristics of RTS: time-driven vs. event-driven vs. priority-driven; hard vs. firm vs. soft real-time; critical need to meet deadlines, fault-tolerance, and safety; impacts on requirements and resources. Properties of RTOS and their application domains: control systems, embedded systems, DSP, multimedia, etc. Basic issues in resource management, allocation, and scheduling to satisfy the timing constraints. Implementation strategies: cyclic executives, non-pre-emptive and pre-emptive real-time operating systems (RTOS). Introductory real-time schedulability analysis and basic real-time uniprocessor scheduling algorithms: rate-monotonic, earliest deadline first, and alternative versions. Usage of RTOS services: task management, intertask communication and synchronization, memory management, time management, interrupt support, configuration and initialization. A survey of the services offered in different types of RTOS and the current state of industrial practice. Lectures: three hours per week.

COEN 345 Software Testing and Validation (4 credits)

Prerequisite: SOEN 342. Overview of the three phases and deliverables of a project. Validation vs. verification, reviews, walkthrough. Testing: acceptance testing, integration testing, module testing, etc. Writing stubs, etc. Performance testing. Role of formal methods. Code inspection. Defect tracking. Causality analysis. Software Metrics and quality management. Project will include the preparation of a requirement document, an implementation (code), test case generation and product testing. Lectures: three hours per week. Laboratory: two hours per week.

COEN 412 Digital Electronics (3.75 credits)

Prerequisite: ELEC 311. Modelling of semiconductor devices for analysis and simulations. MOS, CMOS, TTL, Schottky TTL, ECL, and GaAs circuits. Switching speeds, power dissipation, noise immunity, fan-in and fan-out. Flip-flops and multi-vibrators. Interface and BiCMOS circuits. D/A and A/D converters. Static and

dynamic random-access memories. Read-only memories and programmable logic devices and arrays. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

COEN 414 Digital Systems Design II (3.75 credits)

Prerequisite: COEN 312. Two-level and multilevel logic optimization techniques. Hardware description languages (VHDL) for synthesis and simulation. Asynchronous design. Algorithmic state machines. Clocking and clock skew. Metastability. Self-timed concepts. Finite state machine (FSM) optimization. State reduction. FSM partitioning. Programmable logic devices and field programmable gate arrays. Data path and control design for processors. Testing issues. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

COEN 416 Computer Architecture and Design (3 credits)

Prerequisite: COEN 311, 312. Review of basic computer architecture designs. Fundamentals of computer design and performance. Cost issues. Instruction set design principles. Memory hierarchies: registers, caches, and virtual memories. Basic processor implementation issues. High performance computing issues such as pipelining, superscalar, and vector processing. Input/output subsystem designs. Lectures: three hours per week

COEN 417 Microprocessor Systems (4.5 credits)

Prerequisite: COEN 311, 312. Introduction to microprocessor interfacing. Bus functions, bus interconnections, synchronous and asynchronous bus. Signal flow and data transfer, decoding for I/O and memory, memory organization and structures. Interfacing examples; parallel interfacing, serial interfacing, the interrupt system; bus arbitration and DMA. Analog-to-digital and digital-toanalog structures and interfacing. Floppy disc and CRT controllers; bus standards; local area networks. Benchmarking and comparative study of recent microprocessors. Lectures: three hours per week. Laboratory: three hours per week.

Real-Time System Design **COEN 418** (4.5 credits)

Prerequisite: COEN 312 or COMP 327; COMP 346. Introduction to real-time systems. Requirements, programming, design, applications, reliability, and fault tolerance. Real-time and multi-tasking operating systems. Multitasking and schedule, task control, intertask communication and synchronization, interrupt and exception handling, examples. Real-time multi-processor system design: concurrent programming and examples of programming languages, concurrent processes and reliability, resource sharing and control, inter-processor communication and synchronization, bus configuration and link configuration, special processors. Case studies in real-time system design. Lectures: three hours per week. Laboratory: three hours per week.

COEN 420 Real-Time Systems Design (3.00 credits)

Prerequisite: COEN 320; SOEN 343. Focus on zmodelling languages, code generation from design models, scheduling algorithms and timing analysis of the design and implementation. Introduction to real-time development methods: modelling lanugages (RT_UML, ROOM, SDL, OMT, MSC, etc.), their semantics, diagrams, and notations. Architectural aspects: look at techniques for allocating and scheduling tasks on processors to ensure that deadlines are met. Requirements Analysis: external events specification, use cases, scenarios, sequence diagrams denoting timing constraints, concurrent collaboration diagrams representing interaction of messages, state diagrams representing states and transitions. Multiprocessor scheduling algorithms: heuristics, utilization balancing, next-fit, bin-packing, bidding, and buddy. Distributed end-to-end schedulability analysis. Lectures: three hours per week.

COEN 421 Embedded Systems and Software Design (4.5 credits)

Prerequisite: COEN 320. Focus on aspects of complete embedded systems issues (low power, hardware/software codesign, fault-tolerance and reliability, memory size, etc.), as well as real-time issues (real-time communication and protocols; clock synchronization and algorithms for faulttolerant synchronization; and user design interface). Simulation techniques for developing, testing, and verifying the real-time performance of the target system. A design project provides the opportunity to design, implement, and test a realtime embedded system. Lectures: three hours per week. Laboratory: three hours per week.

COEN 431 Software Engineering (4 credits)

Prerequisite: COMP 352. Introduction to the software life cycle. Software life cycle models. Methods and tools for requirements analysis, specification; design, implementation, verification and maintenance of large, complex software system. Software reliability. Project documentation, organization and control, communication, and time and cost estimates. Lectures: three hours per week. Laboratory: two hours per week. NOTE: Students who have received credit for COMP 354 may not take this course for credit.

COEN 445 Communication Protocols and **Network Security** (4 credits)

Prerequisite: COMP 346; ELEC 361. The study of remote access to and communications between computers. Basics of communications protocols. Layered architectures and standards. Network layers and end-to-end layers. Importance of security. Principles of encryption and authentication. Network security protocols: X509, Internet Protocol and Security (IPSEC) Architecture. Lectures: three hours per week. Laboratory: two hours per week.

COEN 490 Computer Engineering Project (4 credits)

Prerequisite: Final-year standing or permission of the Department; ENGR 411 concurrently. This will be a design project carried in groups of about four students under the direct supervision of a faculty member, and will normally be carried out over two terms. General project specifications and membership of design groups will be determined by the Department in consultation with faculty members and, where feasible, with industry, Each group will choose a group leader who will be responsible for overall coordination of the project. The project will consist of three phases with deadlines for completion determined by the Department. The first phase consists of the project specification and plan of work where each member of the group will submit in writing and orally, one portion of the total specification. This will be graded for content and quality of presentation. The second phase consists of project execution. The third phase consists of the preparation and presentation of a report. Again, each member of the group is expected to prepare a portion of the final report and to present it both in writing and orally. Tutorials will consist of meetings with the supervising faculty member, as well as some instruction and exercises on verbal and oral presentations. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

NOTE: Students are responsible for acquiring a complete set of instructions and the document Form and Style before beginning the project.

COEN 498 Topics in Computer Engineering (3 credits)

Prerequisite: Permission of the Department. The course, when offered, will include topics which complement elective courses in computer engineering and computer science. Lectures: three hours per week.

ELECTRICAL ENGINEERING

ELEC 251 Fundamentals of Applied Electromagnetics (3 credits)

Prerequisite: ENGR 273; EMAT 232 previously or concurrently. Electric charge, Coulomb's law, electrostatic forces, electric field, Gauss' law, electric potential, stored energy. Dielectrics, properties of materials in electric fields. Electric current, conduction in a vacuum and in material media, displacement current, magnetic field of a current, force on a current-carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism in material media, magnetic circuits. Time-varying fields. Capacitance, resistance, inductance, elements of electric circuits. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 311 *Electronics I* (4.5 credits) Prerequisite: ENGR 273. Diodes: the ideal diode; terminal characteristics of junction diodes; analysis of diode circuits; the small signal model and its application; operation in the reverse-

breakdown region — Zener diodes; rectifier circuits; limiting and clamping circuits. Bipolar junction transistors: structure and physical operation; DC analysis: biasing considerations: small signal analysis and parameters; hybrid π model, T model; common base, common emitter, common collector configurations. Fieldeffect transistors: structure and physical operation; DC analysis; biasing considerations; small signal analysis and parameters; hybrid π model, T model; common gate, common source, common collector configurations. Differential and multistage amplifiers: differential pair; differential gain; common-mode gain and common mode rejection ratio (CMRR). Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week.

ELEC 312 Electronics II (4.5 credits) Prerequisite: ELEC 311, 361. High frequency models: s-domain analysis, transfer functions; hybrid π model at high frequency; common base, common emitter, common collector configurations; common gate, common source, common collector configurations; differential BJT pairs at high frequency; MOS differential pair at high frequency. Feedback: general feedback structure; properties of negative feedback; the four basic feedback configurations: series-shunt, series-series, shunt-series, shunt-shunt; loop gain and stability problems; effect of feedback on amplifier poles; bode plots and frequency compensation. Power amplifiers: classification and output stages; class A, B, C, and AB amplifiers; biasing the class AB amplifier; variations on the class AB configuration; IC power amplifiers and MOS power transistors. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week.

ELEC 321 Introduction to Semiconductor Materials and Devices (3.5 credits)

Prerequisite: ELEC 251. Fundamentals underlying optical and electronic devices. The structure and growth of crystals. The energy band model for elemental and compound semiconductors. Electronic and optical properties of semiconductors. Electroluminescence and photoluminescence. The semiconductor in equilibrium. Carrier transport and non-equilibrium phenomena. Introductions to junctions and devices. The laboratory demonstrates the basic electrical and optical properties of semiconductor materials. Lectures: three hours per week. Laboratory:

Fundamentals of Electrical Power Engineering (3.75 credits)

three hours per week, every three weeks.

Prerequisite: ENGR 273; ELEC 251. Review of fundamentals of AC circuit analysis. Overview of power systems. Three-phase circuits: balanced three-phase circuits with star and delta connected loads, power measurements. Magnetic circuits. Transformers. Power conversion techniques: single phase AC/DC rectifiers, DC/DC choppers and DC/AC converters. DC machines: Operating

principle, separately excited DC motor, torque speed characteristics and control methods using rectifiers and choppers. Induction machines: Theory of three-phase induction machines, equivalent circuit parameters, efficiency, torque speed characteristics and control methods using inverters. Overview of power distribution systems. Safety codes. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 334 Electric Machinery (3.75 credits) Prerequisite: ENGR 370. Three-phase circuits. Magnetic fields, circuits, and forces; transformers; basic features of rotating machines; models, characteristics and applications of dc machines, polyphase synchronous and induction machines. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks. NOTE: Computer Engineering and Electrical Engineering students may not take this course for credit.

ELEC 351 Electromagnetic Waves and **Guiding Structures** (3 credits)

Prerequisite: ELEC 251; EMAT 332. Maxwell's equations. Differential forms of the laws of electromagnetism. Boundary conditions. Power and energy. Uniform plane waves. Transmission line theory. Rectangular waveguides. Antennas. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 353 Basic Electromagnetics and Transmission Line Theory (3 credits)

Prerequisite: EMAT 252; ENGR 273. Laws of electromagnetism, including differential forms. Boundary conditions. Maxwell's equations. Plane Waves. Transmission line theory. Antennas. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 361 Signals and Systems (3 credits) Prerequisite: EMAT 232, 252; ENGR 273. Laplace transforms. System functions. Impulse response. Convolution. The exponential and trigonometric forms of the Fourier series. Frequency domain plots of Fourier series coefficients. Mean square convergence. Gibbs' phenomenon. The Cauchy limit form of the Fourier transform. Transforms of periodic functions. Relation between the Fourier and Laplace transforms. Frequency domain plots. Difference equations. The Z transform. The Z plane. Relation between the Z transform and the Fourier and Laplace transforms. Unit pulse response. Numerical convolution. Discrete Fourier transform. Lectures: three hours per week. NOTE: Students who have received credit for EMAT 312 may not take this course for credit.

ELEC 411 Pulse and Waveform Generation (3.75 credits)

Prerequisite: ELEC 312, 361. Modelling and techniques of analysis. Multivibrator circuits: analysis, design, and applications. Oscillator circuits. Linear sawtooth generators. Pulse

transformers and blocking oscillators. Negativeresistance devices and some applications. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 421 Solid State Devices (3.75 credits) Prerequisite: ELEC 321. Junction theory (PN junctions, Schottky and ohmic contacts, heterojunctions). Diodes and bipolar transistors. Lightemitting diodes, photodetectors, solar cells, and fibre optics. Lasers: operating principles and applications in optoelectronic devices. Planar silicon junctions and transistors will be designed. fabricated and evaluated in the laboratory, including resistivity measurements, semiconductor cleaning, oxidation, diffusion, photolithography, etching, metallization, and comparison of design with experimental results. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 422 Design of Integrated Circuit Components (3.75 credits)

Prerequisite: ELEC 421. Structures, characteristics and design of MOS capacitors and MOSFETs. Structures, characteristics and design of laser diodes. Optoelectronic devices and integrated circuits. Planar MOS devices, including capacitors and MOSFETs will be designed, fabricated, and evaluated in the laboratory. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 431 Electrical Power Systems (3.75 credits)

Prerequisite: ELEC 331. Inductance, capacitance, resistance of polyphase transmission lines; current and voltage relations of transmission lines; load flow studies; symmetrical and unsymmetrical faults; power system stability. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 432 Control of Electrical Power **Conversion Systems** (3.75 credits)

Prerequisite: ENGR 372; ELEC 331. Basic considerations and control requirements. Control system principles and structures. Controller characteristics and operation. Static power conversion systems. Electromechanical systems and electrical machine modelling. Control system design. Applications to electric motor drives and typical power conversion systems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 433 Power Electronics (3.75 credits) Prerequisite: ELEC 311, 331. Introduction to power electronics: definition, applications and classification of converters. Review of analytical techniques. Overview of power semiconductor switches. AC/DC rectifiers. Switch mode DC/DC converters. Resonant mode DC/DC converters. DC/AC inverters. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 441 Analog Filter Design (3.75 credits)

Prerequisite: ENGR 370. Two-port networks and parameters. Magnitude and phase approximation. Butterworth and Chebyshev filters. Realization of high-order transfer functions. GIC and FDNR secord order active RC filters. Op-amp based designs. Monolithic continuous time filter. OTA based designs. Monolithic sampled data filters. Switched capacitor filters. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 442 Introduction to Digital Signal Processing (3.75 credits)

Prerequisite: ELEC 361. Review of discrete-time system properties and associated mathematical tools. Properties of linear-time invariant digital filters. Common digital filter structures. Common approaches to the design of digital filter transfer functions meeting time or frequency domain specifications. Computer-aided design and simulation of digital filters. A/D and D/A converters. Effect of finite word lengths. Description of a typical DSP chip. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 453 *Microwave Engineering* (3.75 credits)

Prerequisite: ENGR 370; ELEC 351. Properties of waveguides, striplines, and microstrips. Scattering parameters. Butterworth and Chebyshev impedance transformers. Microwave couplers, cavities, and Fabry-Perot resonators. Periodic structures. Microwave filter design. Faraday rotation and non-reciprocal devices. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 454 Optical Electronics (3.75 credits)
Prerequisite: ENGR 370; ELEC 351. The
Gaussian beam. Optical properties of dielectrics.
Slab and fibre waveguides. Multilayer optical impedance transformation. Optical couplers, gratings, and distributed feedback structures.
Principles of electro-optic devices. Interferometric devices. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 455 Acoustics (3 credits)

Prerequisite: ELEC 351. Sound generation and propagation in elastic media; conversion between acoustical, electrical, and mechanical energy. Lumped-parameter approximations, sound in rooms, underwater acoustics, microphones; loudspeakers and audio communications problems; noise and vibration control problems. Lectures: three hours per week.

ELEC 456 Antennas (3 credits)

Prerequisite: ELEC 351. Antenna fundamentals and definitions. Radiation integrals. Dipoles and loops. Arrays. Antenna self and mutual impedance. Matching techniques. Travelling wave antennas. Broadband antennas. Equivalence principle. Aperture antennas. Antenna measurement techniques. Lectures: three hours per week.

Fundamentals of Telecommunications Systems (3.75 credits)

Prerequisite: ELEC 361; ENGR 371. Introduction to basic telecommunications concepts and systems. Analog communications: AM and FM, system level consideration of noise-bandwidth tradeoffs. Digital communications: sampling and quantization, digital modulation techniques, the matched filter. Redundancy encoding. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 462 Digital Transmission Systems (3.75 credits)

Prerequisite: ELEC 461, 471. Properties of transmission media: wire, coax, optical fibre, radio, satellite. Fundamentals of digital transmission; properties of noise, optimum receiver concepts. Performance of modulation techniques: PAM, PCM, PSK, FSK, QAM, Spread spectrum. Error control coding; ARQ and FEC. Basic concepts of information theory. Lectures: three hours per week, alternate weeks.

Telecommunication Networks (3 credits)

Prerequisite: ELEC 461, 471. Introduction to layered network architecture; data link control and communication channels. Delay models in data networks; simple queueing systems; multi-access communications; ALOHA, CSMA, reservation schemes, conflict-free access schemes. Satellite, packet radio networks, token rings and polling; routine and flow control; ISDN. Lectures: three hours per week.

ELEC 464 Communications Systems Engineering (3.75 credits)

Prerequisite: ELEC 462. Communications system topologies: Point-to-Point, Point-to-Multipoint, Access and Backbone. Multiple-Access techniques and communications resource sharing: FDMA, TDMA, CDMA, system operation/design and related issues, performance comparison, switching techniques, switched network and signalling. Wireline communications systems: issues, system design, example systems: DSL, HFC, SONET, ATM. Wireless communications systems: issues, link engineering, system design, example systems: Satcom, Terrestrial Microwave: PCS, Cellular, LMDS/LMCS. Lectures: three hours per week, alternate weeks.

ELEC 465 Internetworking and Network Management (3.75 credits)

Prerequisite: ELEC 463. Broadband communications: concept, issues, signalling techniques, examples. Multimedia communications: traffic characteristics, classes, issues (e.g. QOS) and architectures. Traffic control: issues and techniques (illustrated with TCP/IP). Internetworking: issues, architectures (e.g. router, bridge, gateway), spanning trees, protocols and standards: ISO, IP and IPv6. Network management: issues, architecture, management information base.

Functional areas: fault management, configuration management, security management, performance management, accounting management, standards (e.g. SNMP, CMIP, TMN). Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 471 Random Processes (3 credits) Prerequisite: ENGR 371; ELEC 361. Definition and classification of random processes; ergodicity and stationarity; auto and cross correlations; power spectral density Gaussian processes; linear transformations, estimation, and prediction; nonlinear transformations (full- and half-wave rectification); diffusion processes, Markov chains, Markov processes, Poisson processes, application to queueing. Lectures: three hours per week.

ELEC 472 Performance Evaluation of Telecommunication Systems (3 credits)

Prerequisite: ELEC 463. Performance measures: delay, throughput, loss probability, error probability. Performance evaluation techniques: analysis, simulation, queueing models: birth-death models, imbedded Markov chains, multidimensional Markov chains. Markov modulated processes. Simulation: event and time-driven simulations, variance reduction techniques, software (e.g. OPNET). Lectures: three hours per week.

ELEC 473 Overview of Communications Systems (3 credits)

Prerequisite: ELEC 461. Broad perspective of the overall operation of a telecommunications company (systemic approach). Introduction to most of the engineering-related aspects of managing a telecommunications company, be it a conventional or wireless telephone company, a competitive toll or a local service company. Overview of the elements that must be considered by engineers working in these fields, primarily in terms of the Canadian industry, including Canadian telecommunications regulation, but also in terms of the market globalization of telecommunications. Impact of emerging telecommunications technologies. Project work will include the simulation of endto-end networks. Lectures: three hours per week.

ELEC 490 Electrical Engineering Project (4 credits)

Prerequisite: Final-year standing or permission of the Department; ENGR 411 concurrently. This will be a design project carried in groups of about four students under the direct supervision of a faculty member, and will normally be carried out over two terms. General project specifications and membership of design groups will be determined by the Department in consultation with faculty members and, where feasible, with industry. Each group will choose a group leader who will be responsible for overall coordination of the project. The project will consist of three phases with deadlines for completion determined by the Department. The first phase consists of the project

specification and plan of work where each member of the group will submit in writing and orally, one portion of the total specification. This will be graded for content and quality of presentation. The second phase consists of project execution. The third phase consists of the preparation and presentation of a report. Again, each member of the group is expected to prepare a portion of the final report and to present it both in writing and orally. Tutorials will consist of meetings with the supervising faculty member, as well as some instruction and exercises on verbal and oral presentations. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

NOTE: Students are responsible for acquiring a complete set of instructions and the document Form and Style before beginning the project.

ELEC 498 Topics in Electrical Engineering (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Electrical and Computer Engineering Department. The course content may vary from offering to offering and will be chosen to complement elective courses available in a given year.

INDUSTRIAL ENGINEERING

INDU 211 Introduction to Production and Manufacturing Systems

(3 credits)

History of industrial engineering. Role of industrial engineers. Types of manufacturing and production systems. Material flow systems. Job design and work measurement. Introduction to solution methodologies for problems which relate to the design and operation of integrated production systems of humans, machines, information, and materials. Lectures: three hours per week.

INDU 311 Simulation of Industrial Systems (3.5 credits)

Prerequisite: ENGR 371. Modelling techniques in simulation; application of discrete simulation techniques to model industrial systems; random number generation and testing; design of simulation experiments using different simulation languages; output data analysis. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. Tutorial: one hour per week.

INDU 313 Industrial Economics

(3 credits)

Prerequisite: ACCO 220. Economic analysis for engineering decision making; the finance function in an industrial enterprise, time value of money; basic interest formulas; annual cost comparison; present value analysis; rate of return; depreciation and taxes; multiple alternatives; mathematical models for equipment replacement; break-even, sensitivity, and risk analysis; introduction to decision analysis; concepts of cost engineering. Lectures: three hours per week.

INDU 320 Production Engineering (3 credits)

Prerequisite: INDU 323. The systems approach to production. Interrelationships among the component blocks of the system: forecasting, aggregate planning, production, material and capacity planning, operations scheduling. An overview of integrated production planning and control including MRP II, Just in Time manufacturing (JIT). Lectures: three hours per week.

INDU 323 Industrial Operations Research (3 credits)

Prerequisite: EMAT 232. An introduction to deterministic mathematical models with emphasis on linear programming. Applications to production, logistics, and service systems. Computer solution of optimization problems. Lectures: three hours per week.

INDU 330 Engineering Management (3 credits)

Organizational structures, their growth and change. Motivation, leadership, and group behaviour. Design of alternatives for improving organizational performance and effectiveness. Planning, organization and management of engineering projects. Management for total quality. Lectures: three hours per week.

INDU 372 Quality Control and Reliability (3 credits)

Prerequisite: ENGR 371. Importance of quality; total quality management; statistical concepts relevant to process control; control charts for variables and attributes; sampling plans. Introduction to reliability models and acceptance testing; issues of standardization. Lectures: three hours per week.

INDU 410 Safety Engineering (3.5 credits)
Prerequisite: MECH 221; ENGR 361. Engineering design for the control of workplace hazards.
Occupational injuries and diseases. Codes and standards. Workplace Hazardous Materials Information Systems (WHMIS). Hazard evaluation and control. Design criteria. Risk assessment. Safety in the manufacturing environment. Applications in ventilation, air cleaning, noise and vibration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 411 Computer Integrated Manufacturing (3.5 credits)

Prerequisite: MECH 311. Concepts and benefits of computer integrated manufacturing (CIM). Design for manufacturing. Computer-aided design, process planning, manufacturing (computer numerical control parts programming), and inspection. Robots in CIM. Production planning and scheduling in CIM. System integration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 412 Human Factors Engineering (3.75 credits)

Prerequisite: INDU 320; ENGR 371. Elements of anatomy, physiology, and psychology;

engineering anthropometry; human capacities and limitations; manual material handling; design of workplaces; human-machines system design; design of controls and displays; shift work. Applications to a manufacturing environment. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

INDU 421 Facilities Design and Material Handling Systems (3.5 credits)

Prerequisite: INDU 320. An introduction to planning and design of production and manufacturing. Facility layout and location. Material handling systems and equipment specifications. Computeraided facilities planning. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

INDU 423 Inventory Control (3.5 credits) Prerequisite: INDU 320. Inventory analysis and control systems; the role of forecasting in controlling inventories; the role of inventories in physical distribution; supply chain management; work in process inventories; inventory in just-in-time manufacturing systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 463 Industrial Automation (3 credits) Prerequisite: ENGR 372 previously or concurrently. Introduction to mechanization of industrial processes such as machining, material handling, assembling, and quality control; selection of actuators and sensors for mechanization; design of sequential control circuits using classical methods, ladder diagram, travel-step diagram and cascade method; specifying control sequences using GRAFCET and FUP; special purpose circuits such as emergency circuits, timers, and programmable logic controllers (PLCs); case studies dealing with typical industrial manufacturing processes and computer simulation. Lectures: three hours per week.

INDU 466 Decision Models in Service Sector (3 credits)

Prerequisite: ENGR 371; INDU 320. The course surveys applications of decision models in the service sector. Efficiency and effectiveness issues in the service sector such as police deployment, municipal resource allocation, health care, and criminal justice models are covered. Case studies from Canada and other countries are discussed using operations research, operations management, and statistical techniques. Lectures: three hours per week. NOTE: This is the same course as DESC 466 with the exception of prerequisites.

INDU 471 Stochastic Models in Industrial Engineering (3 credits)

Prerequisite: ENGR 371. Overview of probability theory; probability distributions; exponential model and Poisson process; discrete-time and continuous-time Markov chains; classification of states; birth and death processes; queueing theory. Application to industrial engineering

problems. Lectures: three hours per week. NOTE: Students who have received credit for INDU 371 may not take this course for credit.

INDU 475 Advanced Concepts in Quality **Improvement** (3 credits)

Prerequisite: INDU 372. Statistical experimental design issues such as randomized blocks, factorial designs at two levels, applications on factorial designs, building models, Taguchi methods. Lectures: three hours per week.

INDU 490 Capstone Industrial Engineering Design Project (4 credits)

Prerequisite: 75 credits in the programme; ENGR 410 concurrently. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report by each student at the end of the Fall Term, a final report by the group and individual oral presentation at the end of the Winter Term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member.

NOTE: Students who have received credit for INDU 480 may not take this course for credit.

Topics in Industrial **INDU 498 Engineering** (3 credits)

Prerequisite: Permission of the Department chair. This course may be offered in a given year upon the authorization of the Mechanical Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in the Industrial Engineering programme. Lectures: three hours per week.

MECHANICAL ENGINEERING

Mechanical Engineering **MECH 211 Drawing** (3 credits)

Drawing as a communicating means. The third and the first angle views. Orthographic projection of points, lines, planes and solids. Principal and auxiliary views. Views in a given direction axonometric views. Intersection of planes and solids, development of surfaces. Sectional views and drafting practices. Dimensioning, size tolerancing and fits. Computer-aided drawing and solid modelling. Working drawings — detail and assembly drawing. Design practice. Lectures: two hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

MECH 215 Programming for Mechanical and Industrial Engineers I (3 credits)

Prerequisite: MATH 204 (cégep mathematics 105); COMP 201. Writing simple programmes using assignment and sequence. Variables. Simple types. Operators and expressions. Conditional and repetitive statements. Input and output. Simple functions. Programme structure and organization. Definition and scope. Data abstraction and encapsulation. Introduction to

classes and objects. Constructors. Examples and assignments will be relevant to engineering. Lectures: three hours per week. Tutorial: one hour per week.

MECH 216 Programming for Mechanical and Industrial Engineers II (3 credits)

Prerequisite: MECH 215. Class definitions. Designing classes and member functions. Class libraries and their uses. Input and output. Programme development. Introduction to software engineering. Specification and implementation. Inheritance. Examples and assignments will be relevant to engineering. Lectures: three hours per week. Tutorial: one hour per week.

Materials Science (2 credits) Prerequisite: CHEM 205 (cégep Chemistry 101). Relationships between properties and internal structure, atomic bonding; molecular, crystalline and amorphous structures; crystalline imperfections and mechanisms of structural change; microstructures; structures and mechanical properties of polymers. Lectures: two hours per week. Tutorial: two hours per week. NOTE: Students who have received credit for ENGR C221 may not take this course for credit.

MECH 311 Manufacturing Processes (3.5 credits)

Prerequisite: MECH 313. Fundamentals of manufacturing processes and their limitations, metrology, machine shop practice, safety and health considerations, forming, machining and casting processes, welding and joining, plastic production, and non-conventional machining techniques. Laboratory includes use of basic machines, preparation of shop drawings with emphasis on production and field trips to local industries. Lectures: three hours per week. Tutorial: four hours per week, alternate weeks, including industrial visits. Laboratory: two hours per week, alternate weeks.

MECH 313 Machine Drawing and Design (3 credits)

Prerequisite: MECH 211. The use of drawings and other graphical methods in the process of engineering design. Industrial standards and specifications, standard components and their use in product design. Detailed study of standard machine elements and assemblies, including various types of mechanical drives, cams, clutches, couplings, brakes, seals, fasteners, springs, and bearings; their representation and function in design and working drawings. Dimensioning and tolerance systems related to manufacturing processes, interchangeability, quality control, patent procedures. Pencil thinking and computer graphics in the design process. Computer-aided machine drawing. A student design project will be an integral part of this course. A four-hour introduction to machine shop techniques forms part of the tutorial. Lectures: three hours per week. Tutorial: two hours per week.

MECH 321 Properties and Failure of Materials (3.5 credits)

Prerequisite: MECH 221. The service capabilities of alloys and their relationship to microstructure as produced by thermal and mechanical treatments; tensile and torsion tests; elements of dislocation theory; strengthening mechanisms; composite materials. Modes of failure of materials; fracture, fatigue, wear, creep, corrosion, radiation damage. Failure analysis. Material codes; material selection for design. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 341 Kinematics and Dynamics of Mechanisms and Manipulators (2.5 credits)

Prerequisite: EMAT 232; ÉNGR 243. Geometry of motion and mobility criteria; planar and spatial mechanisms; general relationship governing relative motion, displacement, velocity, acceleration and Coriolis acceleration. Vector calculus, complex vectors, and graphical methods for velocity and acceleration. Instantaneous centres; line of centres method for velocity determination. Static and dynamic force analysis of planar mechanisms; effect of friction forces; static force-torque relationship for manipulators; virtual work method; dynamics of manipulators. Lectures: two hours per week. Tutorial: two hours per week, alternate weeks. Laboratory: two hours per week, alternate weeks.

MECH 342 Theory of Machines (2.5 credits) Prerequisite: MECH 341. Cam kinematics; cam layout; basic follower motions; pressure angle; cam curvature constraints. Velocity, acceleration and jerk of cam followers. Kinematics of spur gears; standard teeth-layout of gear and pinion; involutometry; contact ratio; non-standard gears. Helical gears for parallel and crossed shafts; worm gear layout. Straight bevel gears, spiral and hypoid bevel gears. Gear trains; planetary gear trains. Differentials and differential screws. Force analysis of gears. Gyroscopic effect in machines. Static and dynamic balancing of rotating masses reciprocating machinery with single and multiple cylinders. Lectures: two hours per week. Tutorial: two hours per week, alternate weeks. Laboratory: two hours per week, alternate weeks.

MECH 343 Theory of Machines I (3.5 credits)

Prerequisite: EMAT 232; ENGR 243. Introduction to mechanisms; position and displacement; velocity; acceleration; synthesis of linkage; robotics; static force analysis; dynamic force analysis; forward kinematics and inverse kinematics; introduction to gear analysis and gear box design; kinematic analysis of spatial mechanisms. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for MECH 341 may not take this course for credit.

MECH 351 Thermodynamics II (3.5 credits) Prerequisite: ENGR 251. Brief review of ideal gas processes. Semi-perfect gases and the gas tables. Mixtures of gases, gases and vapours, air conditioning processes. Combustion and combustion equilibrium. Applications of thermodynamics to power production and utilization systems: study of basic and advanced cycles for gas compression, internal combustion engines, power from steam, gas turbine cycles, and refrigeration. Real gases. Lectures: three hours per week. Tutorial: one hour per weeks. Laboratory: two hours per week, alternate weeks.

MECH 352 Heat Transfer I (3.5 credits)
Prerequisite: EMAT 311. Analytical and numerical methods for steady-state and transient heat conduction. Empirical and practical relations for forced- and free-convection heat transfer. Radiation heat exchange between black bodies, and between non-black bodies. Gas radiation. Solar radiation. Effect of radiation on temperature measurement. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 361 Fluid Mechanics II (3.5 credits) Prerequisite: ENGR 361. Selected solutions of the Navier-Stokes equations. Introduction to turbulent flow. Fully developed pipe and duct flows, major and minor losses, flow measurement. Euler equations, potential flows, superposition of elementary plane flows. Boundary layers, flow about immersed bodies. Propagation of sound waves, isentropic flow of ideal gases in one dimension, stagnation properties, normal shocks. Introduction to open channel flows. Laboratory experiments: flow visualization, laminar and turbulent pipe flows, lift and drag of airfoils, Stokes' flow, numerical solution of potential flows. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 372 Industrial Electronics (3.5 credits)

Prerequisite: ENGR 370. A survey of electronic components and systems used in industry. Analog devices; the transistor, the operational amplifier and their models. Amplifiers. Digital devices: gates, logic devices. Large scale integrated circuits, microcomputers. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks. NOTE: Students who have received credit for ELEC 318 may not take this course for credit. NOTE: Electrical Engineering and Computer Engineering students may not take this course for credit.

MECH 373 Instrumentation and Measurements (3.5 credits)

Prerequisite: ENGR 370. Unified treatment of measurement of physical quantities; static and dynamic characteristics of instruments — calibration, linearity, precision, accuracy, and bias and sensitivity drift; sources of errors; error analysis; experiment planning; data analysis techniques; principles of transducers; signal

generation, acquisition and processing; principles and designs of systems for measurement of position, velocity, acceleration, pressure, force, stress, temperature, flow rate, proximity detection, etc. The course includes demonstration of various instruments. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 411 Design and Analysis of **Mechanical Components** (2.5 credits)

Prerequisite: MECH 311. Analytical review of current design practices and specification of standard components encountered in mechanical engineering. Introduction to overall system reliability estimates, safety considerations, interchangeability of mechanical devices and influence of stress-strength in determining the actual configuration of mechanical elements. Standard components covered include various types of mechanical drives, cams, clutches, couplings, brakes, seals, fasteners, springs, and bearings. Lectures: two hours per week. Tutorial: two hours per week. Laboratory: two hours per week, alternate weeks.

MECH 412 Computer-Aided Mechanical Design (3.5 credits)

Prerequisite: MECH 313. Introduction to computational tools in the design process. Introduction to the fundamental approaches to computer-aided geometric modelling, physical modelling and engineering simulations. Establishing functions and functional specifications with emphasis on geometric tolerancing and dimensioning, manufacturing and assembly evaluation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

Theory of Machines II **MECH 413** (3.5 credits)

Prerequisite: MECH 343. Spur gears; helical, worm and bevel gears; gear trains, design and analysis; cam design; balancing of machinery; theory of flywheel; theory of universal joints; theory of friction. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks. NOTE: Students who have received credit for MECH 342 may not take this course for credit

MECH 421 Mechanical Shaping of Metals and Plastics (3.5 credits)

Prerequisite: MECH 221. Metal forming: extrusion, forging, rolling, drawing, pressing, compacting; shear line theory, sheet forming limits. Metal cutting, machinability, tooling. Plastics shaping: extrusion, moulding, vacuum forming. Consideration of the mechanical parameters critical for process control and computer applications. Interaction of materials characteristics with processing to define product properties: cold working, annealing, hot working, super plasticity, thermomechanical treatment. Energy conservation, safety, product quality, and liability. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 422 Mechanical Behaviour of **Polymer Composite Materials**

(3 credits)

Prerequisite: ENGR 244; MECH 221. General applications of polymer composite materials in aircraft, aerospace, automobile, marine, recreational, and chemical processing industries. Mechanics of a unidirectional lamina. Transformation of stress, strain, modulus, and compliance. Off-axis engineering constants, shear and normal coupling coefficients. In-plane and flexural stiffness and compliance with different laminates, including cross-ply, angle-ply, quasi-isotropic, and general bidirectional laminates. Hygrothermal effects. Strength of laminates and failure criteria. Micromechanics. Lectures: three hours per week.

MECH 423 Casting, Welding, Heat Treating, and Non-Destructive Testing

(3.5 credits)

Prerequisite: MECH 221. Comparative analysis of the various techniques of casting, welding, powder fabrication, finishing, and non-destructive testing. Consideration of the control parameters that are essential to define both automation and robot application. Materials behaviour which determines product micro-structure and properties. Technology and theory of solidification, normalizing, quenching, surface hardening, tempering, aging, and thermomechanical processing for steels, cast irons and A1, Cu, Ni and Ti allovs. Energy conservation, worker safety, quality control, and product liability. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 424 Design and Fabrication of Micromachines and Micromechanisms (3.5 credits)

Prerequisite: MECH 311, 343, Introduction to micromachining processes; mechanical properties of materials used in micromechanical systems; design and fabrication of free standing structures; sacrificial and structural layers; finite element modelling; micromechanical components; solid lubrication of microbearings; special techniques: double-side lithography, anodic bonding, electrochemical drilling, deep etching, LIGA process, laser microfabrication; influence of IC fabrication processes on the mechanical properties; applications in microdevices; simulation and packaging. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 425 Manufacturing of Composites (3.5 credits)

Prerequisite: MECH 311. Fibres and resins. Hand lay up. Autoclave curing. Compression molding. Filament winding. Resin transfer molding. Braiding. Injection molding. Cutting. Joining. Thermoset and thermoplastic composites. Process modelling and computer simulation. Non-destructive evaluation techniques. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 426 Stress and Failure Analysis of Machinery (3 credits)

Prerequisite: ENGR 244. Analysis of stresses, strains and deformations in machine elements; non-symmetric bending of beams; shear centre for thin-walled beams; curved beams; torsion of non-circular shafts and tubes; thick wall cylinders; plates and shells; contact elements; stress concentrations; energy methods; failure modes, analysis and prevention; buckling, fracture, fatigue and creep. Lectures: three hours per week.

MECH 431 Principles of Aeroelasticity (3 credits)

Prerequisite: EMAT 311; ENGR 243. Aerodynamic loading of elastic airfoils. Phenomenon of divergence. Effect of flexible control surface on divergence of main structure. Divergence of one-and two-dimensional wing models. Phenomenon of flutter. Flutter of two- and three-dimensional wings. Flutter prevention and control. Panel flutter in high speed vehicles, flutter of turbomachine bladings, galloping vortex-induced oscillations, bridge buffeting. Lectures: three hours per week.

MECH 441 Mechanical Engineering Design (3 credits)

Prerequisite: ENGR 244; MECH 313, 343. Introduction to overall reliability estimates and influence of stress-strength in determining the actual configuration of mechanical elements. Probabilistic design theory. Concepts in design; probabilistic approach; fatigue and failure of mechanical elements under dynamic loading; shafting; bolted and welded joints; anti-friction and journal bearings; design of gears. Lectures: three hours per week. Tutorial: two hours per week.

MECH 443 *Mechanical Vibrations* (3.5 credits)

Prerequisite: EMAT 311; ENGR 370; MECH 343. Transient vibrations under impulsive shock and arbitrary excitation: normal modes, free and forced vibration. Multi-degree of freedom systems, influence coefficients, orthogonality principle, numerical methods. Continuous systems; longitudinal torsional and flexural free and forced vibrations of prismatic bars. Lagrange's equations. Vibration measurements. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 444 Guided Vehicle Systems (3 credits)

Prerequisite: MECH 443. Definition and classification of guided transportation systems. Track characterization: alignment, gage, profile, and cross-level irregularities. Wheel-rail interactions: rolling contact theories, creep forces. Modelling of guided vehicle components: wheel set, suspension, truck and car body configurations, suspension characteristics. Performance evaluation: stability hunting, ride quality. Introduction to advanced vehicles. Lectures: three hours per week.

MECH 445 Machine Design (4 credits)
Prerequisite: MECH 441. Design of springs;
design of gear and hydraulic drives, design for

hydrodynamics and hydrostatic lubrication; optimum design of mechanical systems, design strategy, value and merit function, maximizing and minimizing procedures. Laboratory work includes an advanced design project representative of those encountered in industry. Equivalent laboratory time: four hours per week, two terms. NOTE: Not available for credit for students taking ENGR 481.

MECH 446 Process Equipment Design (3 credits)

Prerequisite: MECH 321. Design of pressure vessels, towers, reactors, tanks, heat exchangers, piping systems, etc. as used in the petro-chemical, power generation, pulp and paper, and related industries. Compliance with pertinent codes and regulations; detailed analysis of shells, formed heads, flat closures; expansion stresses; wind and earthquake effects. Application to actual problems from industry. Lectures: three hours per week.

MECH 447 Fundamentals of Vehicle System Design (3 credits)

Prerequisite: MECH 343. Mechanics and construction of wheels and tires: rolling resistance, tractive and braking forces, brake system design: components of mechanical, hydraulic and pneumatic brake systems, braking efficiency, antilock braking devices, performance characteristics of road vehicles: transmission design, driving condition diagrams, acceleration, speed and stopping distance, gradability, steering mechanisms: design and kinematics, suspension spring and shock absorbers: anti-roll and anti-pitch devices, chassis and body design considerations. Lectures: three hours per week.

MECH 448 Vehicle Dynamics (3 credits) Prerequisite: MECH 447 previously or concurrently. Tire-terrain interactions; side-slip, cornering and aligning properties of tires; camber angle and camber torque; estimation of braking/tractive and cornering forces of tires; steady-state handling of road vehicles; steering response and directional stability; handling and directional response of vehicles with multiple steerable axles; handling of articulated vehicles; handling and directional response of tracked and wheeled off-road vehicles; directional response to simultaneous braking and steering. Lectures: three hours per week.

MECH 452 Heat Transfer II (3.5 credits)
Prerequisite: MECH 351, 352, 361. Heat exchangers. Condensation and boiling heat transfer.
Principles of forced convection. Analysis of free convection from a vertical wall. Correlations for free convection in enclosed spaces. Mass transfer. Special topics of heat transfer. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 453 Heating, Ventilation and Air Conditioning Systems (3 credits)

Prerequisite: MECH 352. Heating and cooling

load calculation. Overview of heating and air conditioning systems. Review: Vapour compression refrigeration cycles, refrigerant properties, psychometrics. Performance characteristic of components: evaporators, condensers, compressors, throttling devices (expansion valves, capillary tubes). System performance characteristics: calculation of system operating conditions based on the capacities of its components and outdoor and indoor conditions. Controls: operational, capacity. Computer-aided design methods. Defrosting. Estimation of energy consumption for heating with heat pumps. Fundamentals of refrigerant piping, water piping, and air distribution systems. Experimental methods for system development. Lectures: three hours per week.

MECH 454 Vehicular Internal Combustion Engines (3 credits)

Prerequisites: MECH 351, 361. Mechanical design of vehicular engines for different applications. Gas exchange and combustion engine processes. Combustion chambers design. Fuels for vehicular engines. Fuel supply, ignition and control systems. Cooling and lubrication of engines. Emissions formation and control. Engines' operational characteristics — matching with vehicles. Enhancement of engine performance. Engine testing. Environmental impact of vehicular engines on global pollution. Recent developments in energy efficient and "clean" engines. Design or calculation project of vehicular engine.

MECH 461 Gas Dynamics (3.5 credits) Prerequisite: MECH 351, 361. Review of one-dimensional compressible flow. Normal and oblique shock waves; Prandtl-Meyer flow; combined effects in one-dimensional flow; non-ideal gas effects; multi-dimensional flow; linearized flow; method of characteristics. Selected experiments in supersonic flow, convergent-divergent nozzles, hydraulic analogue and Fanno tube. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 462 Turbomachinery and Propulsion (3 credits)

Prerequisite: MECH 351, 361. Review of the gas turbine cycle and components arrangement. Types of turbo-propulsion for aircraft: turboprop, turbofan, and turbojet. Energy transfer in incompressible and compressible turbomachines: the Euler equation, velocity triangles. Axial-flow compressors; mean-line analysis. Mechanisms of losses in turbomachines. Three-dimensional motion in turbomachines; the radial equilibrium equation and its numerical solution by finite difference methods (computer project). Dimensional analysis of incompressible and compressible flow in turbomachines, compressor and turbine performance maps; surge and stall. Centrifugal compressors. Axial-flow turbines. Prediction of performance of gas turbines, components matching. Lectures: three hours per week.

MECH 463 Fluid Power Control (3.5 credits) Prerequisite: ENGR 361, 372. Introduction to fluid power; pneumatic devices; fluidic devices; hydraulic system components; hydraulic and electro-hydraulic systems; dynamic performance of fluid power systems; fluid logic. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 464 Aerodynamics (3 credits) Prerequisite: MECH 461. Flow conservation equations, incompressible Navier-Stokes equations, inviscid irrotational and rotational flows: the Euler equations, the potential and stream function equations. Dynamics of an incompressible inviscid flow field: the Kelvin, Stokes, and Helmholtz theorems, Elementary flows and their superposition, panel method for non-lifting bodies. Airfoil and wing characteristics, aerodynamic forces and moments coefficients. Incompressible flows around thin airfoils. Biot-Savart law. vortex sheets. Incompressible flow around thick airfoils, the panel method for lifting bodies. Incompressible flow around wings, Prandtl's lifting line theory, induced angle and down-wash, unswept wings, swept wings. Compressible subsonic flow: linearized theory, Prandlt-Glauert equation and other compressibility correction rules, the area rule. Transonic flow: Von Karman's ransonic small disturbance equation, transonic full potential equation, supercritical airfoils. Lectures: three hours per week.

MECH 465 Gas Turbine Design (3.5 credits)

Prerequisite: MECH 462; MECH 464 concurrently. Study of practical criteria which influence the design of a gas turbine engine, including relevant mechanical and aerodynamic constraints. The aerodynamics of each of the three major components of a modern turbo-fan engine, namely the compressor, the combustor, and the turbine is considered. Air system acoustics, engine aerodynamic matching of components, and modern performance testing methods. A design project is assigned for each of these components. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 471 Microprocessors and Applications (3.5 credits)

Prerequisite: ELEC 318 or MECH 372. Introduction to the concepts and practices of using microprocessors and microcomputers in such applications as instrumentation, manufacturing, control, and automation; architecture and programming techniques; interface logic circuits: I/O systems; case studies of engineering applications. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 480 Flight Control Systems (3 credits)

Prerequisite: ENGR 372. Basic flight control and flight dynamics principles. Aircraft dynamic

equations and performance data. Implementation of aircraft control: control surfaces and their operations, development of thrust and its control; autopilot systems, their algorithms, dynamics and interaction problems. Flight instruments, principles of operation and dynamics. Cockpit layouts — basic configuration, ergonomic design, control field forces; advanced concepts in instruments, avionics and displays; HUD; flight management systems, and communication equipment. Introduction to flight simulation: overview of visual, audio and motion simulator systems; advanced concepts in flight simulators. Lectures: three hours per week.

MECH 481 Materials Engineering for Aerospace (3 credits)

Prerequisite: MECH 321. Different types of materials used in aerospace. Metals, composites, ceramics. High temperature materials. Failure prediction and prevention. Modes of material failure, fracture, fatigue, creep, corrosion, impact. Effect of high temperature and multiaxial loadings. Cumulative damage in fatigue and creep. Materials selection. Lectures: three hours per week.

MECH 482 Avionic Navigation Systems (3 credits)

Prerequisite: ENGR 372. Basics of modern electronic navigation systems, history of air navigation, earth coordinate and mapping systems; basic theory and analysis of modern electronic navigation instrumentation, communication and radar systems, approach aids, airborne systems,

transmitters and antenna coverage; noise and losses, target detection, digital processing, display systems and technology; demonstration of avionic systems using flight simulator. Lectures: three hours per week.

MECH 490 Capstone Mechanical Engineering Design Project (4 credits)

Prerequisite: 75 credits in the programme; ENGR 410 concurrently. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report by each student at the end of the Fall Term, a final report by the group and individual oral presentation at the end of the Winter Term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member.

MECH 498 Topics in Mechanical Engineering (3 credits)

Prerequisite: Permission of the Department chair. This course may be offered in a given year upon the authorization of the Mechanical Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in a given option or options. Lectures: three hours per week.

71.70 DEPARTMENT OF COMPUTER SCIENCE

Faculty

Chair H.F. LI, Professor

Professors
VANGALUR S. ALAGAR
J. WILLIAM ATWOOD
TIEN D. BUI
GREGORY BUTLER

EUSEBIUS J. DOEDEL CLEMENT LAM JOHN MCKAY

THIRUVENGADAM RADHAKRISHNAN

RAJJAN SHINGHAL CHING Y. SUEN

Associate Professors
SABINE BERGLER
B.C. DESAI
TERRILL FANCOTT
DAVID FORD
GOSTA GRAHNE
PETER GROGONO
R. JAYAKUMAR
S.L. KLASA
ADAM KRZYZAK
FRANZ KURFESS

VIRAVANALLUR S. LAKSHMANAN

TAO LI

GRAHAM MARTIN LATA NARAYANAN JAROSLAV OPATRNY DAVID K. PROBST LIXIN TAO

Assistant Professors JOEY PAQUET JUERGEN RILLING

Adjunct Professors T. KASVAND HANG T. LAU K. LIU

Adjunct Associate Professors

P. DINI

WOJCIECH M. JAWORSKI

L. LAM TAO LI

FEREIDOON SADRI MANAS SAKSENA Y.Y. TANG

Adjunct Assistant Professors

C. GROSSNER P. MUSTILLO G.C. PRABHAKAR

Location

Sir George Williams Campus J.W. McConnell Building, Room: LB 901-4 (514) 848-3000

Objectives

Computer Science is the study and design of computer systems: hardware and software. Computer scientists are primarily concerned with the design of algorithms, languages, hardware architecture, systems software, applications software and tools. Applications range from simple game playing to the control of space vehicles, power plants and factories, from banking machines to intelligent fault and medical diagnosis. Computer professionals, in short, are concerned with the creation of computer and information systems for the benefit of society.

Software Engineering is concerned with the theories, methods, and tools required to create reliable, efficient and economical software for the needs of the information technology society. Software engineers design software using the principles and practices of engineering. They apply the theory and mathematics arising from computer science and the emerging areas of software development to the specification, design, implementation, and maintenance of large software projects.

71.70.1 Curriculum for the Degree of Bachelor of/Baccalaureate in Computer Science The Computer Science programme emphasizes fundamentals and techniques that remain relevant and useful for many years after graduation. It consists of a combination of core courses in computer science, programme courses attached to its options, and technical electives. The Computer Science Core provides a basic and broad study of theory, programming methodology, computer architecture, systems architecture, data structures, operating systems, files, databases, and software engineering. The option courses are designed to provide an integrated yet specialized training in particular application areas of the discipline. Each option involves the study of selected advanced elective courses in computer science, as well as courses in other disciplines, to provide further depth in computer science and the particular application area.

The Department offers the following four options: Information Systems, Software Systems, Computer Systems, and Computer Applications. There is an Honours programme corresponding to each option. All options are offered in the co-operative format, with alternating Study and Work terms, for a limited number of students with suitable qualifications.

The **Information Systems option** focuses on business applications of computer systems, with special emphasis on databases, software engineering, and management of information systems.

The **Software Systems option** is concerned with the design and analysis of large-scale software systems.

The **Computer Systems option** focuses on the design of systems with both hardware and software components.

The **Computer Applications option** balances 45 credits of Computer Science courses and 45 credits of courses in another discipline of the student's choice.

71.70.2 Degree Requirements To be recommended for the degree of BCompSc, students must satisfactorily complete an approved programme of at least 90 credits comprising the courses of the Computer Science Core and those courses specified for their particular option in accordance with the graduation requirements of §71.10.5.

Computer Science Core

The Computer Science Core consists of 12 Computer Science courses (39 credits): COMP 228³, 229³, 238³, 239³, 248³, 249³, 326³, 335³, 346⁴, 352³, 353⁴, 354⁴.

1. Information Systems Option

- 39 Computer Science Core
- 2 ENCS 281²
- 10 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- 33 ECON 201³, 203³; COMM 210³, 215³, 217³, 220³, 222³, 224³, 225³, 305³, 308³
- 6 Elective credits from any department with at most three credits from the Faculty of Commerce and Administration (See Note 2.)

2. Software Systems Option

- 39 Computer Science Core
- 2 ENCS 281²
- 22 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- 12 MATH 244³, 251³; STAT 249³, 250³
- 15 Elective credits from any department (See Note 2.)

3. Computer Systems Option

- 39 Computer Science Core
- 2 ENCS 281²
- 10 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- above 300 (See Note 1.)
 30.75 EMAT 212³; ENGR 273^{3.75}; ELEC 311^{4.5}; COMP 361³, 327⁴, 445⁴; ENCS 455⁴; COEN 418^{4.5}
- 8.25 Elective credits from any department (See Note 2.)

4. Computer Applications Option

- 39 Computer Science Core
- 2 ENCS 281²
- 4 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- 45 Elective credits from any department (See Notes 2 and 3.)

NOTES:

- Students may obtain permission from the Department to take no more than two COMP courses numbered between 600 and 699 in this category. Credits obtained from these courses count towards the BCompSc degree and are not creditable towards a higher degree.
- Certain courses are not acceptable as electives. The Undergraduate Programme Guide lists excluded courses and provides additional information about the choice of electives. In exceptional cases, students may obtain permission to take an excluded course from the Associate Dean (Student Affairs).
- At least 24 credits of the 45 elective credits in the Computer Applications Option must be part of a degree programme leading to a Minor or Major in a chosen subject.

71.70.3 Extended Credit Programme Students admitted to an Extended Credit Programme under the provisions of Sections 13.3.2 or 13.8.1 must successfully complete a minimum of 120 credits including:

- 90 Programme requirements as set out in Section 71.70.2
- 12 MATH 202³, 203³, 204³, 205³
- 3 COMP 201³
- 15 Additional credits, as indicated below:
- a) Information Systems Option:
 - 15 elective credits chosen from outside the Faculty of Commerce and Administration and the Department of Computer Science.
- b) Computer Applications Option:
 - 15 elective credits chosen from outside the Faculty of Engineering and Computer Science.

c) Other Options:
CHEM 205³
PHYS 204³, 205³, 224¹, 225¹
and at least four credits chosen from:
BIOL 201³; CHEM 206³; ECON 201³, 203³; ESL 207³, 208³; PHYS 206³, 207³, 226¹

71.70.4 Honours Programme

Students should refer to §16.2.3 of the Calendar for academic regulations for the Honours programme. The following regulations are additional requirements for the Honours BCompSc Programme.

- Applications to enter an Honours programme must be submitted to the Office of the Associate Dean (Student Affairs) at least three months before the start of the term in which the student wishes to enter an Honours programme.
- Students must complete at least 30 credits towards their degree before entering an Honours programme.
- Each student in an Honours programme must have an Honours adviser who approves the student's choice of courses prior to each registration.
- Students must maintain an Annual Weighted Grade Point Average (GPA) of 3.20 or higher to remain in an Honours programme.
- Students who are required to withdraw from an Honours programme may continue in the regular programme of their option provided they are in acceptable or conditional standing according to the academic regulations in §71.10.3.

Course Requirements for Honours Programmes

Honours students must fulfil the requirements of their option. In addition to these requirements, they must include COMP 490 and COMP 495 in their Computer Science electives.

NOTE: Admission profile is 10.12.

71.70.5 Minor in Computer Science

Minor in Computer Science

- 21 COMP 228³, 229³, 238³, 239³, 248³, 249³, 352³
- 3 300-400 level Computer Science elective credits.

71.70.6 Programmes Related to Computer Science

Both Major and Minor programmes in Management Information Systems can be found in the Commerce and Administration Section of the Undergraduate Calendar, §61.

The Faculty of Fine Arts and the Department of Computer Science offer complementary Major programmes. Students who take the Computer Applications Option (see §71.70.2 above) can also take the Major in Digital Image/Sound and the Fine Arts (see §71.80, and the Fine Arts Section, §81).

71.70.7 The Co-operative Format

Director

R. JAYAKUMAR, Associate Professor

Students entering any option of the programme leading to the BCompSc degree may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Computer Science co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

71.70.8 Curriculum for the Degree of BEng in Software Engineering The Software Engineering curriculum includes all aspects of software architecture, design, and management, as well as the traditional computer science core topics of computer mathematics, theory, programming methodology, and mainstream applications. The programme has an engineering core which covers basic science, professional topics, and the engineering approach to problem solving. It also has a discipline core in Software Engineering to cover the engineering approach to all phases of the software process and related topics.

71.70.9

Degree Requirements for the BEng in Software Engineering

Students registered in the Software Engineering programme must complete a minimum of 118.25 credits during four years of full-time study. The programme consists of the Engineering Core, the Software Engineering Core, and an Elective Group.

0 ... 1:4-

Software Engineering Engineering Core (26.75 credits)

		Creait	S
COMP 361	Elementary Numerical Methods	3.00	(See Note 1)
EMAT 212	Calculus and Differential Equations	3.00	
EMAT 232	Matrices and Advanced Calculus	3.00	
ENCS 281	Technical Writing	2.00	
ENGR 273	Basic Circuit Analysis	3.75	
ENGR 371	Probability and Statistics in Engineering	3.00	
ENGR 410	Technical Report	1.50	
SOEN 402	Engineering and Software Law	1.50	(See Note 2)
	Complementary Studies	6.00	(See Note 3)
		26.75	

Note 1: Software Engineering students may take either COMP 361 or ENGR 391.

Note 2: Software Engineering students must replace ENGR 402 by SOEN 402 in the Engineering Core.

Note 3: The Complementary Studies courses consist of ENCS 410 *Social Issues in Computers and Information Technology* and one course chosen from the following list:

		Credits
ENGR 491	Engineers and Society	3.00
ENGR 492	Historical Impact of Technology on Society	3.00
ENGR 493	Engineering, Resources, and Environment	3.00
ENGR 494	Effect of Technology on the Person	3.00
ENGR 495	Technology Assessment and Control	3.00
ENGR 496	Science Policy and Engineering Innovation	3.00
ENGR 497	The Management of Transition to an Information Society	3.00

Software Engineering Core (71.50 credits)

Command Eng.	(Tioo distancy	Credits
COMP 228	System Hardware	3.00
COMP 229	System Software	3.00
COMP 238	Mathematics for Computer Science I	3.00
COMP 239	Mathematics for Computer Science II	3.00
COMP 248	Introduction to Programming	3.00
COMP 249	Programming Methodology	3.00
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 346	Operating Systems	4.00
COMP 352	Data Structures and Algorithms	3.00
COMP 353	Databases	4.00
COMP 465	Design and Analysis of Algorithms	3.00
ENGR 401	Engineering Economics and Management Principles	1.50
SOEN 282	Document Processing	2.00
SOEN 321	Information Systems Security	3.00
SOEN 337	Metrics and Measurement in Software Development	3.00
SOEN 341	Software Process	3.00
SOEN 342	Software Requirements and Specifications	3.00
SOEN 343	Software Design	3.00
SOEN 344	Software Architecture	4.00
SOEN 345	Software Quality Control	4.00
SOEN 357	User Interface Design	4.00
SOEN 383	Software Project Management	3.00
SOEN 490	Software Engineering Design Project	3.00
		71.50

To complete the option, students must choose a minimum of 20 credits from one of the following elective groups.

	ware Applications complete the following two courses:	Credits
ENCS 245 MECH 221	Mechanical Analysis Materials Science	3.00 2.00
and a minimum	of 15 credits chosen from the following courses:	
COMP 442 COMP 451 COMP 471 COMP 472 COMP 473 COMP 474 SOEN 431 SOEN 449 SOEN 475	Compiler Design Database Design Computer Graphics Artificial Intelligence Pattern Recognition Introduction to Expert Systems Formal Methods Component Engineering Imaging and Visualization	3.00 3.00 4.00 4.00 3.00 4.00 3.00 3.00
	ware Systems Design complete the following two courses:	Credits
ENCS 245 MECH 221	Mechanical Analysis Materials Science	3.00 2.00
and a minimum of 15 credits chosen from the following courses:		
COEN 418 COMP 327 COMP 444 COMP 445 SOEN 422 SOEN 423 SOEN 448	Real-Time System Design Digital System Design System Software Design Data Communication and Computer Networks Embedded Systems and Software Distributed Systems Management of Evolving Systems	4.50 4.00 4.00 4.00 3.00 3.00 3.00
Group 3. Build Students must d	ling Studies complete the following courses:	Credits
BLDG 341 BLDG 366 BLDG 459 CIVI 341 ENCS 245 MECH 221	Building Engineering Systems Acoustics and Lighting Computer-Aided Building Design Civil Engineering Systems Mechanical Analysis Materials Science	3.00 3.50 3.00 3.00 3.00 2.00

71.70.10 The Co-operative Format

Director

R. JAYAKUMAR, Associate Professor

Students entering any option of the programme leading to the BEng in Software Engineering degree may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular programme, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Computer Science co-op committee, which includes the student's advisers.

Please refer to $\S 24$ for the schedule of Study and Work terms and the full description of admission requirements.

71.70.11 Course Descriptions Please note that new course numbers have been implemented. For equivalent course numbers under the old system, please consult §200.6

Students from outside the Faculty of Engineering and Computer Science who are not registered in a Computer Science programme may not take more than five COMP courses numbered higher than 212.

Students from outside the Faculty of Engineering and Computer Science who are registered for the Minor in Computer Science may not take more than 30 credits of COMP courses numbered higher than 212.

COMPUTER SCIENCE

COMP 201 Introduction to Computers and Computing (3 credits)

Prerequisite: MATH 201 or equivalent. Overview of a computing system and its operation. Introduction to problem solving and algorithms. Introduction to programme design and development with emphasis on common problem solution. A programming language will be introduced to develop and convey the above topics. Lectures: three hours per week. Tutorial: one hour per week.

NOTES: 1. Students who have received credit for COMP C211 or COMP 212 or COMP 215 or COMP 248 may not take this course for credit. 2. This course may not be taken for credit in the regular undergraduate programmes in Engineering and Computer Science.

COMP 212 FORTRAN for Engineers and Scientists (3 credits)

Prerequisite: MATH 204 or cégep Mathematics 105; MATH 205 or cégep Mathematics 203. Note: It is also assumed that students have had some exposure to computers, either through a cégep course or through exposure to personal computers. A brief introduction to computers and computing systems. A thorough grounding in the use of FORTRAN 77 as a tool for the solution of engineering and scientific problems. Introduction to the principles of software engineering: problem specification, requirements analysis, programme design with emphasis on structured programming, testing, and validation; programme documentation. Lectures: three hours per week. Tutorial: one hour per week. NOTES: 1. Students having credit for a FORTRAN programming course from cégep with a mark of at least 85% may, during the first two weeks of the course, apply to the course coordinator to undertake a FORTRAN programming project appropriate to their field of study in lieu of the normal requirements of the course. 2. Students in the BCompSc programme may not take this course for credit.

COMP 218 Fundamentals of C++ Programming (3 credits)

Prerequisite: MATH 201 or equivalent (no prior experience with computers is assumed). Computers and computing: introduction to components of a computing machine and their capabilities; problem solving with computers; programming; basic elements of C++ language: basic data types, objects, expressions, predefined functions for I/O; simple programmes; programme documentation; control structures; functions: simple library functions for I/O manipulators; arrays: one- and two-dimensional arrays of basic types: classes of objects; analysis and design of classes, implementation of classes. NOTE: This course should not be taken by students who have taken COMP 248. NOTE: Students who have received credit for COMP 248 may not take this course for credit.

COMP 228 System Hardware (3 credits)

Prerequisite: MATH 203 or 209 or cégep Mathematics 103, MATH 204 or 208 or cégep Mathematics 105. Processor structure, Data and Instructions, Instruction Set Processor (ISP) level view of computer hardware, assembly language level use. Memory systems — RAM and disks, hierarchy of memories. I/O organization, I/O devices and their diversity, their interconnection to CPU and Memory. Communication between computers at the physical level. Networks and computers. Lectures: three hours per week. Tutorial: one hour per week. NOTE: Students who have received credit for COMP 220 may not take this course for credit.

COMP 229 System Software (3 credits)

Prerequisite: COMP 228; COMP 248. Hardware-software interface, system kernel, system services, system evolution. Assemblers, compilers, linkers, and loaders. System component interfaces. User-level view of operating systems. Lectures: three hours per week. Tutorial: one hour per week.

COMP 238 Mathematics for Computer Science I (3 credits)

Prerequisite: MATH 203 or MATH 209 or cégep Mathematics 103, MATH 204 or MATH 208 or cégep Mathematics 105. Sets, Propositional Logic, Predicate Calculus, Boolean Algebra. Functions and Relations. Functions. Proof Techniques, including proof by induction. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 231 may not take this course for credit.

COMP 239 Mathematics for Computer Science II (3 credits)

Prerequisite: COMP 238; MATH 205 or cégep Mathematics 203 previously or concurrently. Counting and Number theory. Permutations and combinations. Graph theory and finite state machines. Programme correctness and analysis. Lectures: three hours per week. Tutorial: one hour per week.

COMP 248 Introduction to Programming (3 credits)

Prerequisite: MATH 204 or MATH 208 or cégep Mathematics 105. Writing simple programmes using assignment and sequence. Variables. Simple types. Operators and expressions. Conditional and repetitive statements. Input and output. Simple functions. Programme structure and organization. Definition and scope. Data abstraction and encapsulation. Introduction to classes and objects. Constructors. Lectures: three hours per week. Tutorial: one hour per week. NOTE: Students who have received credit for COMP 215 or COMP 218 may not take this course for credit.

COMP 249 Programming Methodology (3 credits)

Prerequisite: COMP 238, COMP 248; MATH 205 or cégep Mathematics 203. Class definitions. Designing classes and member functions. Class libraries and their uses. Input and output. Programme development. Introduction to software engineering. Specification and implementation. Inheritance. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 245 may not take this course for credit.

COMP 251 Introduction to Business Programming (3 credits)

Prerequisite: Cégep 420-911 or equivalent. Introduction to business data processing. Basic file organization and handling, record layouts, elementary information storage and retrieval. Detailed specifications of the Common Business Oriented Language (COBOL). Structured programming concepts will be emphasized. This course will include programming assignments involving basic business applications, to be prepared, tested, and documented individually. Lectures: three hours per week. Tutorial: one and a half hours per week.

NOTE: Restricted to students registered in a Commerce and Administration programme.

COMP 326 Computer Architecture (3 credits)

Prerequisite: COMP 346. Classification schemes. Functional units, bussing systems and input/output structures, storage systems, instruction sets. Microprogramming. Survey of different kinds of computer architectures. Software influences on architecture. Advanced topics in computer architecture. Lectures: three hours per week. Tutorial: one hour per week.

COMP 327 Digital System Design (4 credits)

Prerequisite: COMP 228 or COEN 311. Reduction of Boolean expressions. Digital integrated circuits. Combinatorial circuits. Sequential logic, counters, shift registers. Microprocessors. Interfacing with external devices. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week. NOTE: Students who have received credit for COMP 325 or COEN 312 may not take this course for credit.

COMP 335 Introduction to Theoretical Computer Science (3 credits)

Prerequisite: COMP 239 or COEN 231; COMP 249 or COEN 244. Finite state automata and regular languages. Push-down automata and context-free languages. Pumping lemmas. Applications to parsing. Turing machines. Undecidability and decidability. Lectures: three hours per week. Tutorial: one hour per week.

COMP 346 Operating Systems (4 credits)
Prerequisite: COMP 229 or COEN 311;
COMP 352. Operating system evolution and
services. Process management: concepts of

processes, concurrent languages, process states, process communication, operating system structure, processor scheduling, monitors. System management: virtual memory, resource allocation, queue management, communication with peripherals, exception handling. File systems. Interactive computation. Protection. Distributed systems. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 343 or COMP 385 may not take this course for credit.

COMP 352 Data Structures and Algorithms (3 credits)

Prerequisite: COMP 239 or COEN 231; COMP 249 or COEN 244. This course will emphasize the definition, usage, and manipulation of fundamental data structures and their associated algorithms: stacks and queues, trees, tables, lists, arrays, strings, sets; and will introduce files and access methods. External sorting, B-trees, multi-key organizations. Lectures: three hours per week. Tutorial: one hour per week.

COMP 353 Databases (4 credits)

Prerequisite: COMP 352. Classical database management: modelling, data integrity, data independence and security, ANSI/SPARC architecture, data models (relational, hierarchical, and network), database design, detailed study of the relational model. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week.

COMP 354 Software Engineering I (4 credits)

Prerequisite: COMP 352. Principles of software development and maintenance. Software lifecycle models and deliverables: requirements analysis and specification, architectural and detailed design, implementation, verification and validation. People, product, and process issues: team dynamics, communication, presentations, reviews. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week. NOTE: Students who have received credit for COEN 431 may not take this course for credit.

COMP 361 Elementary Numerical Methods (3 credits)

Prerequisite: COMP 239 or COEN 231; COMP 249 or COEN 244. Error analysis and computer arithmetic. Numerical methods for solving linear systems, Gaussian elimination, LU decomposition. Numerical solution of non-linear equations, fixed point iterations, rate of convergence. Interpolations and approximations, Lagrange polynomials, divided differences, discrete least-square approximation, Legendre polynomials. Numerical integration, Newton-Cotes formulas, Romberg integration. Emphasis will be on the development of efficient algorithms. Lectures: three hours per week. Tutorial: one hour per week.

COMP 367 Techniques in Symbolic Computation (3 credits)

Prerequisite: COMP 238 or MAST 217; COMP 248 or MAST 234. An applicationoriented introduction to symbolic computation, as it is used in algebra, number theory and combinatorics: capabilities of symbolic systems (e.g. MAPLE); arithmetic mod p and mod m; Chinese remainder theorem; finite fields; error-correcting codes; continued fractions; public-key encryption schemes (e.g. RSA); generation of combinatorial objects. NOTE: Students who have received credit for MAST 332 may not take this course for credit.

COMP 421 Microprocessor Systems Architecture (4 credits)

Prerequisite: COMP 327 or equivalent. Micro-computer families. Memory interface. I/O systems. Peripheral control. Single-chip microprocessors. Coprocessors. System busses. Board level design. Multicomputer systems. Communication architecture. Lectures: three hours per week. Laboratory: two hours per week. NOTE: Students who have received credit for COMP 427 or COMP 486 may not take this course for credit.

COMP 442 Compiler Design (3 credits)
Prerequisite: COMP 229 or COEN 311;
COMP 335; COMP 352. Compiler organization
and implementation. Programming language
constructs, their syntax and semantics. Syntax
directed translation, code optimization. Run-time
organization of programming languages.
Lectures: three hours per week.

COMP 444 System Software Design (4 credits)

Prerequisite: COMP 346. Detailed examination of data structures and algorithms of a contemporary operating system: file system, processes, memory management, device management. Comparison of techniques used with those employed in other operating systems. Lectures: three hours per week. Laboratory: two hours per week.

COMP 445 Data Communication and Computer Networks (4 credits)

Prerequisite: COMP 346. The study of remote access to and communications between computers. Network architectures and topology; communication protocols and interfaces, functional layers; transmission facilities including communications equipment, line utilization, switching, and error handling; standard protocols; network interfaces including routing and flow control; point-to-point, broadcasting, and local networks theory and current practice; high-level protocols; reliability and security, encryption. Lectures: three hours per week. Laboratory: two hours per week.

COMP 451 Database Design (3 credits)
Prerequisite: COMP 353. Review of the
relational data model and introduction to
distributed databases. DBMS architectures.
Data dependencies, decomposition algorithms.

Data dictionaries. Concurrency, integrity, security, and reliability issues. Query decomposition, optimization, and evaluation strategies. Physical database design. Lectures: three hours per week.

COMP 454 Software Engineering II (3 credits)

Prerequisite: COMP 335; COMP 353; COMP 354. Issues of quality and productivity in software engineering. Software engineering principles for the development of complex systems: cost and schedule estimation, software metrics, software process models, team organization. Formal specification techniques. Quality of process and products: reviews, inspections, testing, statistical reliability estimation, formal methods. Lectures: three hours per week.

COMP 457 *Office Automation* (3 credits)
Prerequisite: COMP 352. Design of an office automation system. Technical aspects of some office functions. Petri nets. Communication networks. Interface design. Security and cryptography. Future developments. Lectures: three hours per week.

COMP 458 Structure of Information Systems (3 credits)

Prerequisite: COMP 353. Information systems and organizations. Representation and analysis of system structure. Decision theory. Information system applications. Information centres. System evaluation and selection. Lectures: three hours per week.

COMP 463 Discrete System Simulation (3 credits)

Prerequisite: COMP 249 or COEN 244; MATH 243 or ENGR 371 or COMM 215. Discrete random variables and their distributions. A comparison of simulation techniques: discrete, continuous, and hybrid. Queueing models, analysis of data. Model building. Review of simulation languages. Application to business problems and operations research. Lectures: three hours per week.

COMP 465 Design and Analysis of Algorithms (3 credits)

Prerequisite: COMP 335; COMP 352. Empirical and theoretical measures of the efficiency of algorithms. Algorithm design techniques. A study of good algorithms related to set operations, sorting, and graph theory. A survey of hard problems, NP-completeness, and intractable problems. Lectures: three hours per week.

COMP 471 Computer Graphics (4 credits) Prerequisite: COMP 352. Display memory; generation of points, vectors, etc. Interactive versus passive graphics; CRT devices and plotters, analog storage of images. Digitizing and digital storage. Pattern recognition. Data structures and graphics software. The mathematics of three-dimensional transformations; projections. Applications in computer-aided design and instruction. Lectures: three hours per week. Laboratory: two hours per week.

COMP 472 Artificial Intelligence (4 credits)
Prerequisite: COMP 352. Scope of AI. Heuristics.
Problem-solving methodologies. Game-playing.
Reasoning by deduction and induction. Natural
language processing. Lectures: three hours per
week. Laboratory: two hours per week.

COMP 473 Pattern Recognition (3 credits)
Prerequisite: COMP 352. Sequential and parallel recognition methodologies. Preprocessing.
Feature extraction and selection. Syntactic and statistical approaches. Discriminant functions.
Techniques for learning. Bayesian decision procedures. Neural nets. Lectures: three hours per week.

COMP 474 Introduction to Expert Systems (4 credits)

Prerequisite: COMP 352. Basic concepts and techniques. Knowledge representation in inferencing. Building a small expert system. Knowledge engineering and large system development. Survey of tools and expert systems. The expert system market. Lectures: three hours per week. Laboratory: two hours per week.

COMP 490 Computer Science Project I (3 credits)

Prerequisite: Completion of 60 credits. Students will work on a computer science project under the supervision of a faculty member and submit a suitable written report on the work carried out. Students planning to register for this course should consult with the Department prior to registration in the final year of study.

COMP 492 Computer Science Project II (3 credits)

Prerequisite: COMP 490 previously or concurrently. Students having permission of the Department to carry out a major project will register for both COMP 490 and 492. Alternatively, they may carry out a second smaller project.

COMP 495 Honours Seminar (1 credit)
Prerequisite: Registration in final year of the
Honours programme. Students are required to
attend a number of departmental seminars
(initially ten) and submit a written report on one
of them. There will be an administrator in charge
of this course.

SOFTWARE ENGINEERING

SOEN 282 Document Processing (2 credits)

Prerequisite: ENCS 281. Document processing software; choice of appropriate tools. Preparing reports with the aid of a spreadsheet. Using Internet facilities for group collaboration, including the construction of shared hypertext. Extraction of documentation from source code. Configuration management. Principles and use of markup languages such as SGML and HTML. Documentation standards such as ISO 9000. Lectures: two hours per week. Tutorial: two hours per week.

SOEN 321 Information Systems Security (3 credits)

Prerequisite: COMP 346. Protocol layers and security protocols. Intranets and extranets. Mobile computing. Electronic commerce. Security architectures in open-network environments. Cryptographic security protocols. Threats, attacks, and vulnerabilities. Security services: confidentiality; authentication; integrity; access control; non-repudiation; and availability. Security mechanisms: encryption; data-integrity mechanisms; digital signatures; keyed hashes; access-control mechanisms; challenge-response authentication; traffic padding; routing control; and notarization. Key-management principles. Distributed and embedded firewalls. Security zones. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 337 Metrics and Measurement in Software Development

(3 credits)

Prerequisite: ENGR 371. Theory of measurement and metrics. Experimental design and data analysis. Operational profiles and usage specifications. Statistical usage testing and reliability estimates. Estimation of project parameters. Defect tracking; six sigma. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 341 Software Process (3 credits)
Prerequisite: COMP 229, 282, 352. Basic
principles of software engineering. Introduction
to software process models. Activiites in each
phase, including review activities. Working in
teams: organization; stages of formation; roles;
conflict resolution. Introduction to notations used
in software documentation. How to read, review,
revise, and improve software documentation.
Lectures: three hours per week. Tutorial: one
hour per week.

SOEN 342 Software Requirements and Specifications (3 credits)

Prerequisite: SOEN 341. Requirements engineering. Functional and non-functional requirements. Traceability. Test generation. Formal and informal specifications. Formal specification languages. Reasoning with specifications. Correctness issues. Verification. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 343 Software Design (3 credits)
Prerequisite: SOEN 341. Design notations and methodologies. Design principles: information hiding; coupling and cohesion. Object-oriented design with current formal and informal notations. Scenario-based design, and the role of use cases. Design patterns. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 344 Software Architecture (4 credits)

Prerequisite: SOEN 343. Information hiding, dependencies, layers, partitions. Architecture descriptive notations. Common architectural styles. Components, patterns, and frameworks.

Fundamental structures for architectures: layers; partitions; uses relation; client-supplier relation; peer-to-peer relation; callbacks. Roles and views of architecture. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

SOEN 345 Software Quality Control (4 credits)

Prerequisite: SOEN 337, 341, 371. Testing: acceptance testing; integration testing; module testing; and writing stubs. Verification and validation. Statistical techniques. Defect tracking, causality analysis. Reviews, inspections, walk-throughs. Exception handling. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

SOEN 357 User Interface Design (4 credits)

Prerequisite: SOEN 342. The human side: I/O; memory; and information processing. Interaction: mental models; human error; interaction frameworks and paradigms. Direct manipulation. User interface design: principles; standards; and guidelines. User-centred design: standards and design rationale; heuristic evaluation; iterative design; and prototyping. Task-centred design. Rationalized design: usability engineering; dialogue notations; user models; diagrammatic notations; and textual notations. Evaluation: with the user; without the user; quantitative; and qualitative. Implementation support. Help and documentation. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

SOEN 383 Software Project Management (3 credits)

Prerequisite: SOEN 282, 337, 341. Organization of a large software project. Roles of team members, team leaders, and managers. Scheduling; tools for monitoring and maintaining a schedule. Budget control. Progress monitoring. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 402 Engineering and Software Law (1.5 credits)

Prerequisite: ENCS 281. A review of laws, in Québec and elsewhere, relating to engineering in general and software systems in particular. Registration, property, right and restrictions of ownership, contracts, civil responsibility, copyright, patenting. Lectures: one and a half hours per week.

SOEN 422 Embedded Systems and Software (3 credits)

Prerequisite: COMP 346. Characteristics of embedded systems. Microcontroller architecture and typical target systems. Programming issues related to mixed languages. Real-time kernel services: task management; intertask communication and synchronization; memory management; time management; interrupt support; configuration; and initialization. Development

methods: state machines and fuzzy logic. Debugging methods for interrupts. Testing and simulation methods. Lectures: three hours per week.

SOEN 423 *Distributed Systems* (3 credits) Prerequisite: COMP 346. Introduction to the theory of distributed systems and networks. Distributed system and network characteristics: failure; delay/asynchrony; and throughput. Types of network interaction. Fault tolerance. Recovery from failure. Lectures: three hours per week.

SOEN 431 Formal Methods (3 credits) Prerequisite: SOEN 342, 343. Components of formal systems. Formal methods; levels of formalism. Integrating formal methods into the existing software life-cycle process model for a given project. Attributes of a formal specification language. Formal notations based on extended finite state machines; case studies involving the design of user interfaces, reactive systems, and concurrent systems. Software development using formal methods, including tools for: type checking; debugging; verifying checkable properties; validation of refinements; and code generation from refinements. Lectures: three hours per week.

SOEN 448 Management of Evolving Systems (3 credits)

Prerequisite: SOEN 342, 343, 344. Software maintenance: corrective; perfective; and adaptive. Software reuse; construction of reusable software. Techniques for reverse engineering and re-engineering software. Software development as "growing" software. Long-term evolution of software systems. Legacy systems. Lectures: three hours per week.

SOEN 449 Component Engineering (3 credits)

Prerequisite: SOEN 344. Review of high-level language concepts and abstraction mechanisms. Programming with functional and logical languages. Typed vs. untyped languages. The use of scripting languages and other language-based techniques to assemble systems from high-level components. Lectures: three hours per week.

SOEN 475 Imaging and Visualization (3 credits)

Prerequisite: COMP 371, 471. Graphical application programmer interfaces. Generating images from two- and three-dimensional data. Review of simulation techniques. Application of advanced graphics techniques to mathematics, physics, engineering, medicine, and other areas. Lectures: three hours per week.

SOEN 490 Software Engineering Design Project (3 credits)

Prerequisite: SOEN 342, 343, 344, 345; ENGR 410 concurrently. Students will work in teams of 10 to 12 members to construct a significant software application. Team members will give a presentation of their contribution to the project. Laboratory: six hours per week.

71.80 DIGITAL IMAGE/SOUND AND COMPUTER SCIENCE

Faculty

Undergraduate Programme Director THIRUVENGADAM RADHAKRISHNAN, Professor

Location

Sir George Williams Campus J.W. McConnell Building, Room: LB 901-4 (514) 848-3053

Objectives

The Faculty of Engineering and Computer Science and the Faculty of Fine Arts have created a programme of study which combines a comprehensive education in computer science and a complementary set of courses in the fine arts. This programme resides in both Faculties. In the Faculty of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/ Baccalaureate in Computer Science, Computer Applications Option. According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science programme, or a Bachelor of/Baccalaureate in Fine Arts programme. The Fine Arts offering is described in §81.90. The Computer Science programme is described below.

Curriculum

The Computer Applications Option may be taken with either a Major or a Minor in Digital Image/Sound and the Fine Arts. The Major programme consists of the Computer Science Core complemented by 45 credits of study in Fine Arts. It is intended for students with aptitudes in the two areas, and provides a unique education combining depth in computer science knowledge and skills with a full major programme in Fine Arts. The Minor programme is intended for students whose principal interest and aptitude is in the area of computer science, but who wish to further develop their talents in the fine arts for their personal or career goals. It provides 30 credits in Fine Arts and 15 elective credits to complement the 45 credits of the Computer Science Applications Option. Students taking the Minor may use these 15 elective credits to enhance their training through additional Computer Science courses, or they may choose electives from other approved areas in the University, such as Arts, Science or Commerce and Administration.

The Major and the Minor programmes in Digital Image/Sound and the Fine Arts provide students with a knowledge and understanding of digital media concepts, and authoring and scripting for the design of interactive multi-media.

Structure of the **Programmes**

The Major and Minor in Digital Image/Sound are based on the Computer Applications Option. This Option is defined as follows (see §71.70.2).

Computer Applications Option

- 39 Computer Science Core
- ENCS 281² 2
- 4 Elective Computer Science credits chosen from COMP courses numbered above 300
- Elective credits 45

The Major in Digital Image/Sound and the Fine Arts allocates these elective credits as follows:

- 45 credits
- FFAR 250⁶ 6
- DFAR 350⁶ 6
- DFAR 450⁶
- Chosen from DART 2006; EAMT 2056; FMAN 3049; IDYS 2006; PHOT 2006; or one of the SFAR courses
- Chosen from Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses

The Minor in Digital Image/Sound and the Fine Arts allocates these elective credits as follows:

- 30 credits
- FFAR 250⁶
- 6 DFAR 350⁶
- 6 DFAR 450⁶

- 6-12 Chosen from DART 2006; EAMT 2056; FMAN 3049; IDYS 2006; PHOT 2006; or one of the SFAR courses
- 6-12 Chosen from Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses

Admission Requirements

The Digital Image/Sound Major and Minor are limited to students who are enrolled in or simultaneously applying for the Computer Science Applications Option and who are qualified for the Fine Arts component. Applicants must fulfil the admission requirements for the Computer Science Option in Computer Applications (see §71.10.2) and be accepted into the Computer Applications Option.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Digital Image/Sound and the Fine Arts. All applicants must submit to the Programme Office, Visual Arts Building, Room 237, between March 8 – 21, 2000:

- 1. a letter of intent,
- 2. a copy of their most recent transcript;
- 3. a portfolio consisting of written, two-dimensional, three-dimensional and time-based work;
- include excerpts of typed writing samples, two-dimensional work; 10–20 slides; and/or video, maximum 10 minutes (VHS, HI-8mm or 8mm only); and/or a sound tape (analog or DAT), maximum 10 minutes; and/or CD-ROM, KODAK Photo-CD, data cartridge (Syquest, ZIP) or diskette (must be Macintosh compatible); and/or URL reference to a Web site;
- 5. two-dimensional works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form;
- 6. individual works must be labelled including applicant's name, date, size of work, and medium(s) used. Applicants should indicate clearly what is to be reviewed. In the case of computer files, applicants must list precisely the directory/folder or pathname which contains the file(s); the complete file name(s) with extension (if relevant) and the file type;
- 7. still computer graphic images should be presented as slides or hard copy prints. In general, time-based media should be presented on video and/or audio tape. The admissions committee can review Web pages and HTML files compatible with Netscape Navigator. Otherwise, digital video, digital audio, computer graphics animation computer files must be presented as self-running desktop presentations (Macintosh compatible) and should not require a separate application for viewing. Examples are Macromedia Director Projector files or Quicktime Movies. Students should contact the Programme Office to confirm acceptability of viewing format and data storage media;
- 8. the portfolio should demonstrate creative and technical potential as a multi-media designer/artist. Letter of intent and portfolio should indicate experience/skills/knowledge and interest in some of the following areas: writing, critical theory and philosophy; art direction; illustration, painting, photography, graphic design, and typography; audio editing, recording, DJ mixing, music composition, radio production; two-dimensional and three-dimensional computer graphics and animation; design and direction for theatre, film, and video production; software programming, cognitive psychology and human factors engineering for the human computer interface.

FACULTY OF FINE ARTS

81.10	PROGRAMMES AND ADMISSION REQUIREMENTS		
81.20	DEGREE REQUIREMENTS		
81.30	FINE ARTS COURSES OF FACULTY-WIDE INTEREST		
81.35	INTERDISCIPLINARY STUDIES IN SEXUALITY		
81.40	ART EDUCATION AND ART THERAPY		
81.50	ART HISTORY		
81.60	MEL HOPPENHEIM SCHOOL OF CINEMA		
81.70	CONTEMPORARY DANCE		
81.80	DESIGN ART		
81.90	DIGITAL IMAGE/SOUND AND THE FINE ARTS		
81.100	MUSIC		
81.110	81.110.1 Studio Art 81.110.2 Ceramics 81.110.3 Fibres 81.110.4 Interdisciplinary Studies 81.110.5 Painting and Drawing 81.110.6 Photography 81.110.7 Print Media 81.110.8 Sculpture 81.110.9 Women and the Fine Arts		
81.120	THEATRE		

81

FACULTY OF FINE ARTS

Dean CHRISTOPHER JACKSON

Associate Deans JOHN W. LOCKE, Space Planning LOREN LERNER, Research and Graduate Studies KATHLEEN PERRY, Resources and Development ANDREA FAIRCHILD, Academic and Student Affairs

Calendar Section

Location

Sir George Williams Campus Visual Arts Building, Room: VA 250 (514) 848-4600

Objectives

During its 23 years of existence, the Faculty of Fine Arts has achieved an internationally recognized standard of excellence in undergraduate education with the visual and performing arts.

The Faculty situates its students within both the pluralism of the academic experience of the University and our multicultural urban environment. At the same time, Fine Arts curriculum and teaching responds to the context and demands of a changing artistic community.

Programmes and courses in studio or academic disciplines within the visual and performing arts prepare students for entry into that community or for higher education in the arts.

Structure

The Faculty of Fine Arts has two divisions offering numerous programmes.

The PERFORMING ARTS DIVISION consists of the following:

Contemporary Dance	81.70
· · ·	• • • • •
Music	81.100
Theatre	81.120
THEALIE	01.120

The VISUAL ARTS DIVISION consists of the following:

Interdisciplinary Studies in Sexuality	81.35
Art Education and Art Therapy	81.40
Art History	81.50
Cinema	81.60
Design Art	81.80
Digital Image/Sound and the Fine Arts	81.90
Studio Arts	81.110

81.10 PROGRAMMES AND ADMISSION REQUIREMENTS

General admission requirements are listed in §13. Specific requirements for admission to the various programmes leading to the BFA degree are set out in the first column of the following listings. They refer to the table of cégep profiles and other specific requirements defined below.

Profile	Requirements
0.00	Diploma of Collegial Studies (DEC — Diplôme d'études collégiales)
10.6	Six courses in Studio Art (course titles may vary according to cégep) 510-122-90 Drawing from Observation 510-232-90 Theory and Practice of Colour 510-112-91 Visual Language I 510-212-91 Visual Language II 510-312-91 2-D Organization 510-412-91 3-D Organization Two courses in Art History or Art Aesthetics

- 10.12 Mathematics 103, 105, 203
 - Α Interview/Audition
 - G Letter of intent
 - Κ Submission of a portfolio of representative work

Programmes offered: For information concerning any of the following programmes, please consult the calendar section listed opposite each programme.

Recommended Profile and Specific Requirements	Programme	Calendar Section
·	Specializations:	
10.6 or G,K 0.00, A,G,K 0.00, A 0.00, A,G,K 0.00, A,G,K 0.00, A 0.00, A 0.00, A 0.00, A	Art Education Design for the Theatre Drama for Human Development Film Production Film Studies Jazz Studies Music Performance Studies Music Theory/Composition Selected Music Studies Theatre Performance	81.40 81.120 81.120 81.60 81.60 81.100 81.100 81.100 81.120
	Majors:	
10.6 or G,K 0.00 10.6, G,K 0.00, A 0.00, A,G,K 10.6, K 0.00, A,G,K 10.6, 10.12, G,K 10.6, K 0.00, A,G,K 0.00, A,G,K 0.00, A,G,K 0.00, A,G,K 10.6, G,K 0.00, A,G,K 10.6, K 10.6, K 10.6, K 10.6, K 10.6, K 10.6, K 10.6, G,K	Art Education Art History Art History and Studio Art Integrative Music Studies Interdisciplinary Studies Ceramics Contemporary Dance Design Art Digital Image/Sound and the Fine Arts Fibres Film Animation Film Production Film Studies Painting and Drawing Photography Playwriting Print Media Sculpture Studio Art Theatre	81.40 81.50 81.50 81.100 81.110 81.110 81.70 81.80 81.90 81.110 81.60 81.60 81.60 81.110 81.110 81.110 81.110
0.00, 71,0	Minors:	01.120
0.00 10.6, G,K 0.00, A 10.6, G,K 0.00, A,G,K 0.00, A 0.00 0.00, A 0.00, A,G,K 10.6, K 0.00, A 0.00, A	Art History Art History and Studio Art Cinema Digital Image/Sound and the Fine Arts Film Animation Film Studies Interdisciplinary Studies in Sexuality Music Photography Print Media Theatre Women and the Fine Arts	81.50 81.50 81.60 81.90 81.60 81.35 81.100 81.110 81.110 81.110

Transfer Students

Applicants who have completed courses in other colleges or universities may be granted credits (advanced standing) on the basis of the programmes at Concordia University. These advanced standing credits will normally be awarded as general credits and as such may not be equivalent to specific first-year courses at Concordia.

Applicants to a second undergraduate degree must complete a minimum of 60 credits, other than those credited towards the first degree, at least 36 of which must be taken in the new field of Specialization (§16.1.3). Students transferring credits towards a first degree must complete a minimum of 45 credits at Concordia (see §16.1.3).

Students must complete all programme and degree requirements, as well as the Faculty of Fine Arts residence requirements (see §81.20.2).

Mature Entry

General admission requirements to the 108-credit programme (Mature Entry) are listed in §14. Students admitted into the Faculty of Fine Arts through the Mature Entry plan are required to complete 18 credits in addition to the 90 credits normally required for the BFA degree. Fine Arts students are required to complete 18 credits relevant to the student's ultimate area of concentration and chosen with the approval of a faculty adviser.

Extended Credit Programme

Definition of the Extended Credit Programme (ECP) is listed in §13.2. Students admitted to an Extended Credit Programme in Fine Arts are required to complete an additional 30 credits for the degree. These 30 credits must be relevant to the student's ultimate area of concentration and chosen with the approval of a faculty adviser. Advanced standing credits awarded for Ontario Academic Courses (OACs) must be applied towards the ECP portion of a student's degree programme.

81.20 DEGREE REQUIREMENTS

Students preparing for the BFA degree require a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours of work spread across lectures, conferences, tutorials, studios, rehearsals or practice periods, tests, examinations, and personal work.

81.20.1 BFA Degree Requirements

- 1. A candidate for the BFA degree must have qualified for admission to, and successfully completed a programme of concentration in the form of a Specialization (See §16.2.3), Major (See §16.2.3) or a Double Minor* programme in the Faculty of Fine Arts. A selection is made upon entry, prior to registration. The requirement of selecting a programme upon entry should not be thought of as being necessarily a final commitment. Students wishing to transfer out of one degree programme must satisfy the admission requirements of the programme they seek to enter. Programme changes are, however, subject to limitations where certain programmes are in great demand. Students should be aware that to effect certain transfers they may be required to complete more than the 90 credits normally required for the degree.

 *A Minor consists of an approved sequence of 24-30 credits. The term "Double Minor" refers to a combination of two minors selected from the Faculty of Fine Arts; a planned programme of study in two specialized fields in Fine Arts with a lower degree of concentration in both than is afforded by a Major programme.
- A candidate for graduation must have successfully completed 12 credits selected from course
 offerings outside the Faculty of Fine Arts. (Normally, courses in the Department of
 Communication Studies do not fulfil this requirement of outside the Faculty of Fine Arts.)
- A candidate for graduation must have successfully completed the course FFAR 250⁶.
- 4. A candidate for graduation normally may apply no more than 54 credits in studio work towards the 90 credits required for the BFA degree.
- 5. A candidate for graduation must fulfil all university graduation requirements (See §16.2.4).
- The credits obtained for any course may not be used to satisfy the requirements of more than one programme.

81.20.2 Residence Requirements Students are subject to the university residence requirement (see §16.1.3) which states that of the 90 credits required for the BFA degree, a minimum of 45 credits must be taken at Concordia University. Combining both residence requirements implies that the full-time student must enrol for a minimum of two years of study at Concordia University.

To fulfil the residence requirements for a BFA degree with a concentration in:

 Art Education, Ceramics, Fibres, Painting and Drawing, Print Media, Sculpture, or Studio Art: a minimum of 30 credits in Studio Art and six credits in Art History must be completed at Concordia.

- Art History, Art History and Studio Art, Cinema, Design Art, Film Animation, Film Production, Film Studies, Photography, Contemporary Dance, or Interdisciplinary Studies: at least half of the concentration requirements must be completed at Concordia.
- Drama in Education, Theatre, Theatre Performance, or Design for the Theatre: Conception and Realization: a minimum of 30 credits from the Department of Theatre must be completed at Concordia.
- Integrative Music Studies, Jazz Studies, Music Performance Studies, Music Theory/Composition, or Selected Music Studies: a minimum of 30 credits required from the Department of Music must be completed at Concordia.
- 5. Minor programmes: at least half of the required credits must be completed at Concordia.

81.20.3 Course Load

The normal course load for students enrolled in the Faculty of Fine Arts is 30 credits per year for all full-time students, and a maximum of 18 credits per year for part-time students.

- Full-time students may not register for more than 18 credits of their maximum 30 credits in any studio area in any given academic year. Part-time students may not register for more than 12 credits.
- ii) Students may register for a maximum of six credits in which films are produced as a course requirement during any given academic year. See §81.60.2 for list of courses. Also, students are limited, during their degree programme, to 18 credits in Film Production or 24 credits in Film Animation courses in which films are produced as a course requirement (§81.60.2).
- iii) Students may register for a maximum of six credits in Theatre Production in any given academic year, up to a maximum of 18 credits in all.
- iv) Students may register for a maximum of six credits in Music Private Study in any given academic year, up to a maximum of 18 credits in their degree programme.

81.20.4 Academic Performance Requirements For purposes of these regulations, "failure" includes the grades "F", "FNS", "R", and "NR". Failed students are not eligible to write supplemental examinations.

Definitions of Failed Standing

- 1. Failed May Not Re-Register Without Special Permission
- a) Any student who fails courses equivalent to more than the number of credits prescribed below before obtaining the number on record specified, will be Failed. In order to re-register, such a student must obtain special permission from the Faculty Senior Academic Adviser, Student Affairs.

FAILED CREDITS More Than	BEFORE OBTAINING ON RECORD
12	30
24	60
36	90

- b) A Failed student who is given permission to re-register is placed on Academic Probation.
- A student placed on Academic Probation must pass the next 30 credits on the first attempt and satisfy any other conditions specified for readmission. A student failing to meet these requirements is in failed standing for a second time and will be dismissed from the University. In subsequent years, should the student wish to return to university studies, he or she must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

2. Failed - May Not Re-Register

Any student who fails courses equivalent to more than the number prescribed below will be Failed and dismissed. Any Probationary Student who fails to fulfil the terms of the probation will also be Failed and may not apply for readmission. In subsequent years, should the student wish to return to university studies, he or she must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

FAILED CREDITS More Than	APPLICABLE PROGRAMMES
30	90-Credit and Certificate Programmes
36	Mature Entry Programme
42	Extended Credit Programme

81.30 FINE ARTS COURSES OF FACULTY-WIDE INTEREST

Courses

The following courses provide a format in which topics of faculty-wide interest are considered:

FASS:

FASS 391 (also listed as INTE 391) Issues in Sexuality Research (3 credits)

An interdisciplinary survey of approaches to research in sexuality within the humanities, the arts, and the social sciences. Basic concepts of sexual identity, values, conduct, representation, and politics are addressed through such topical concerns as pornography and censorship, and through the perennial dialogue between biological and socio-cultural models of sexuality. The relation between theories and research methods is discussed in the context of classical and current research and creative activity. The syllabus reflects the varying specializations of the instructors from year to year.

FASS 392 (also listed as INTE 392) Introduction to Queer Theory

(3 credits)

An interdisciplinary survey of the basic post-1970 theories of sexual minorities and diversity, in their historical and cultural contexts. Authors from Michel Foucault to Eve Kosofsky Sedgwick are introduced, as well as the work of artists and performers from Derek Jarman to k.d. lang. The syllabus reflects the varying specializations of the instructors from year to year.

FFAR:

FFAR 250 The Visual and Performing Arts in Canada (6 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus.

NOTE: Students who have received credit for FFAR 251 or 252 or IDYS 250 may not take this course for credit.

FFAR 251 The Visual and Performing Arts in Canada I (3 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other

experts in various disciplines are an essential part of the syllabus. This course is equivalent to the first term of FFAR 250.

NOTE: Students enrolled in a BFA programme must register for FFAR 250. Students who have received credit for FFAR 250 or 252 in a previous academic year may not take this course for credit.

NOTE: Students who have received credit for IDYS 251 may not take this course for credit.

FFAR 252 The Visual and Performing Arts in Canada II (3 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus. This course is equivalent to the second term of FFAR 250.

NOTE: Students enrolled in a BFA programme must register for FFAR 250. Students who have received credit for FFAR 250 or 251 in a previous academic year may not take this course for credit.

NOTE: Students who have received credit for IDYS 252 may not take this course for credit.

FFAR 390 HIV/AIDS: Cultural, Social and Scientific Aspects of the Pandemic (6 credits)

An interdisciplinary survey of the major issues and challenges of the HIV pandemic. Such topics as the biology of the virus, therapeutic, clinical and epidemiological research developments, the social costs of sexual taboos and discrimination, and media and artistic representation by and of people with HIV are presented by faculty and visiting community experts. The epidemics in the Western hemisphere, Africa, Asia, and other regions are addressed. Learning is based on lectures, weekly tutorials, and community involvement.

FFAR 398 Special Topics in Fine Arts (3 credits)

A course which provides an opportunity for the study of specialized aspects of Fine Arts. NOTE C/See §200.3

FFAR 399 Special Topics in Fine Arts (6 credits)

A course which provides an opportunity for the study of specialized aspects of Fine Arts. NOTE C/See §200.3

81.35 INTERDISCIPLINARY STUDIES IN SEXUALITY

Coordinator

FRANCES SHAVER, Associate Professor, Sociology and Anthropology

Coordinating Committee

BRIAN FOSS, Associate Professor, Art History MARCIE FRANK, Associate Professor, English ROSEMARY HALE, Associate Professor, Religion EDWARD LITTLE, Associate Professor, Theatre CATHERINE MAVRIKAKIS, Associate Professor, Études françaises
CHANTAL NADEAU, Associate Professor,
Communication Studies
KAT O'BRIEN, Associate Professor, Design Art
DIANA PEDERSEN, Associate Professor, History
THOMAS WAUGH, Professor, Mel Hoppenheim

School of Cinema

Programme

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

27 Minor in Interdisciplinary Studies in Sexuality

- 12 Chosen from FASS 391/INTE 391³, FASS 392/INTE 392³; SOCI 375/ANTH 375³*; FMST 392³; INTE 390/FFAR 390°.
- 9 Elective credits on sexuality and sexual orientation chosen in consultation with the programme coordinator from periodic topics courses and other suitable courses identified in a given year, and from the following regular courses: AHSC 253³; ENGL 445³; FMST 393³; RELI 380³; WSDB 383³.
- 6 Chosen each year from courses in gender and women's studies in consultation with the programme coordinator from a list of available offerings within departments of the Faculties of Fine Arts and Arts and Science.
 - *Prerequisites waived for students having completed six credits in the Minor in Interdisciplinary Studies in Sexuality.

81.40 ART EDUCATION AND ART THERAPY

Faculty

Chair, Art Education T.B.A.

Director, Creative Arts Therapies LELAND PETERSON, Associate Professor

Professors Emeriti STANLEY HORNER LEAH SHERMAN

Professors ELIZABETH J. SACCA DAVID PARISER

Associate Professors LORRIE BLAIR ANDREA FAIRCHILD PAUL LANGDON **CATHY MULLEN** ROBERT J. PARKER STEPHEN SNOW

Assistant Professors RICHARD LACHAPELLE JOSÉE LECLERC CHRISTINE NOVY **DENISE TANGUAY**

Adjunct Professors IRENE GERICKE PIERRE A. GREGOIRE LOUISE LACROIX

Location

Art Education Sir George Williams Campus Visual Arts Building, Room: VA 209-1 (514) 848-4646

Creative Arts Therapies Sir George Williams Campus Visual Arts Building, Room: VA 264 (514) 848-4790

Departmental **Objectives**

The Art Education Department offers two teacher preparation programmes that emphasize the student's development as artist, researcher, and professional. Students are expected to develop an artistic and teaching practice that connects conceptual understanding, critical reflection, and practical experience.

The Major is a three-year programme. In the first two years, students are introduced to the fundamentals of the field of art education. In the third year, students concentrate on professional practice and performance as community art educators in settings such as community centres, adult education programmes, recreation programmes, and museums.

The Specialization in Art Education is a four-year programme leading to teacher certification as an elementary and secondary school art specialist. The programme conforms to the MEQ requirements for an extended teaching practicum and preparation in two art subjects. The number of practicum hours is determined by the MEQ and may be subject to change.

Programmes

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20. The superscript indicates credit value.

N.B. The BFA Specialization in Art Education is subject to approval by the ministère de l'Éducation du Québec (MEQ).

120 BFA Specialization in Art Education

- ARTE 220³, 230³, 320³, 330³, 340³, 420³, 422³, 424³, 434³
- Chosen from INTE 290³, 291³
- EDUC 301³, 305³ ARTE 352³, 354³, 498³ ARTE 423³, 425⁹ 9
- 12
- Chosen from ARTE 398³ offerings
- FFAR 250⁶
- DRAW 200⁶; PTNG 200⁶
- Studio Art courses chosen from FBRS 240⁶, 260⁶; CERA 230⁶; SCUL 2006
- Chosen from ARTH 370³, 371³, 373³

- Studio Art or Art History elective credits from Group B, C or F
- EDUC 210⁶, 445³, 450³, 455³

66 **BFA Major in Art Education**

- ARTE 220³, 230³, 320³, 330³, 340³, 432³, 21 434^{3}
- 12 Studio Art courses chosen from CERA 230⁶; FBRS 240⁶, 260⁶; SCUL 2006; PTNG 2006
- 3 ARTE 398³
- DRAW 200⁶
- Chosen from ARTE 352³, 354³, 398³, 498³
- Art History elective credits from Group B, C or F
- 6 Studio Art or Art History elective credits
- 6 EDUC 210⁶

NOTE: This programme does not lead to

teacher certification. Electives permit a wider choice in courses in preparation for graduate study in areas such as art therapy, museum education, recreation, and arts administration.

81.40.1 Admission to the Specialization and Major in Art Education In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Art Education.

All applicants must submit a *portfolio* of their own work, as well as a *letter of intent* as part of the admission process.

- 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums
- Individual works must be labelled including applicant's name, date, size of work, and medium(s) used.
- 4. Each portfolio must contain a list of contents including all the above information.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- 6. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- Out-of-town applicants may submit photographs and/or slides of their work. Return shipment of out-of-town portfolios is by prior arrangement only.

Portfolios are submitted to the Art Education Portfolio Evaluation Committee, Visual Arts Building, Room 209-1, prior to the deadline of Wednesday, March 15, 2000 (12:00 PM/noon).

All entering students are automatically enrolled in the Major. The Specialization is offered at the thirdyear and fourth-year levels. Upon completion of the second year (completion of 60 credits including ARTE 220, 230, 320, 330), students in the Major may apply for transfer to the Specialization programme.

Admission to the Specialization is assessed on the basis of the applicant's suitability for school-based teaching based on grades for courses completed in the first two years, a letter of intent, two references, the completion of a 70-hour internship in an elementary school environment (ARTE 230) and, in some cases, an interview.

Academic Standing

To remain in good academic standing in the Specialization and be recommended for the Québec Art Specialist teaching permit, students must:

- Achieve at least a "B" grade in the practicum courses ARTE 420, 423, and 425.
 - a. Students who fail any of the above courses are required to withdraw from the Specialization
 - b. Students who obtain a passing grade in any of the above courses that is below a "B" will be placed on conditional standing within the programme and will be so informed in writing. These students will be allowed to repeat the practicum only once in order to achieve the required grade. Students who do not achieve the required grade in the repeated course will be required to withdraw from the Specialization programme.
- Maintain an overall grade average of "B-" or higher in courses of the third and fourth years. Students who do not maintain the minimum grade average during that time will be required to withdraw from the Specialization programme.

Courses

Art Education:

ARTE 201 Art in Early Childhood I (3 credits)

Prerequisite: Enrolment in the Specialization in Early Childhood or Major in Child Studies, or written permission of the Department of Art Education and Art Therapy. An introductory study of the art-making process in early childhood. This course is a studio workshop which investigates potential media and teaching approaches appropriate for the young child.

ARTE 202 Art in Early Childhood II (3 credits)

Prerequisite: ARTE 201. A continuation of ARTE 201.

ARTE 203 Arts in Recreation (3 credits)

A workshop/seminar course in which students are introduced to various art forms currently used in recreation centres. Intrinsic to the course content is a consideration of the role of the arts in recreation and leisure populations.

ARTE 220 Foundations of Art Education (3 credits)

A survey of content and contexts of the art education profession. In studio activities, students explore art making skills and techniques, creative expression, artistic heritage and art in society. This content is related to lesson planning for schools, museums, and community settings. Students are introduced to children's artistic development as well as basic management and

safety standards for the art classroom. Practicum experiences will include observation of children's art processes and some teaching.

NOTE: Students who have received credit for ARTE 200 may not take this course for credit.

ARTE 230 Teaching and Studio Practice (3 credits)

Prerequisite: ARTE 220, or permission of the Department. The course focuses on individual and group learning processes in the art classroom. Using studio activities as a resource, students develop an art teaching unit to be presented in peer teaching workshops. Students are introduced to methods for evaluating student learning and for critically reflecting on learning and teaching. Practicum experiences will include micro-teaching, observation of art teaching in group situations and peer-teaching within the University.

NOTE: Students who have received credit for ARTE 200 may not take this course for credit.

ARTE 320 Multi-Disciplinary Approaches to Art and Teaching (3 credits)

Prerequisite: ARTE 230, or permission of the Department. This course investigates various creative, historical, and critical approaches to art as a basis for developing curriculum content. Students expand their repertoire of skills and techniques for planning and teaching lessons with multiple dimensions. Students also consider the specific requirements of students with special needs and those at different age levels. Practicum experiences will include working with children in community settings or museums or after-school day care settings.

NOTE: Students who have received credit for ARTE 300 may not take this course for credit.

ARTE 330 Introduction to Community Art Education (3 credits)

Prerequisite: ARTE 320, or permission of the Department. The course investigates the various isues and concerns related to community art education. Students develop skills in assessing community needs. After observation and studio research, students develop and propose an art education curriculum for a specific community setting or population. Practicum experiences will include observation of a specific population or community and team-teaching with a community educator.

NOTE: Students who have received credit for ARTE 300 may not take this course for credit.

ARTE 340 Art Education for Adolescents and Adults

(3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. Students are introduced to theories of adolescent and adult development, and the effect these have on their behaviour and attitudes towards learning and art making. Students learn about different types of group

management and support techniques appropriate for adolescent and adult students. The course presents ways to effectively integrate aspects of popular culture into curriculum planning. Practicum experiences will consist of teaching a group of adolescents and adults in a community setting.

Light-Based Media (3 credits) Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. Students are introduced to light-based imaging processes such as photography and xerography. Students plan and successfully execute a lesson based on one of these processes. The course explores ways of evaluating and responding to light-based images. NOTE: Students who have received credit for ARTE 430 may not take this course for credit.

ARTF 354 Time-Based Media (3 credits) Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. Students are introduced to time-based imaging processes such as video and multi-media installations. Students plan and successfully execute a lesson based on one of these processes. The course explores ways of evaluating and responding to time-based

NOTE: Students who have received credit for ARTE 430 may not take this course for credit.

ARTE 398 Special Topics in Art **Education** (3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. A course which provides an opportunity for the study of specialized aspects of art education. Topics chosen for consideration vary from year to year.

ARTE 400 Seminar and Practicum in Art Education (6 credits)

Prerequisite: ARTE 300, enrolment in the Specialization or Major in Art Education or written permission of the Department of Art Education and Art Therapy. A seminar/practicum course in which students interrelate theory and the teaching of art to develop professional skills. Readings and supervised practicum involve the planning and implementation of a curriculum and individual sessions within the framework of an articulated philosophy of art education. NOTE A/See §200.3

ARTE 420 Art Education for Elementary School (3 credits)

Prerequisite: ARTE 320, or permission of the Department. Students apply theories of development and learning to design appropriate lessons for elementary school practicum settings. The course explores currently available teaching resources such as textbooks. MEQ curriculum. and communication technologies. The course also investigates processes and procedures for assessment appropriate to an elementary art classroom. A practicum of 120 hours in an elementary classroom is required in this course.

ARTE 422 Art Education in the Secondary School I (3 credits)

Prerequisite: Fourth-year standing in the Specialization in Art Education, or permission of the Department. A lecture/seminar course where students identify themes and concerns that are appropriate to secondary school students with diverse backgrounds. Students explore the currently available teaching resources such as MEQ curriculum and others, textbooks and communication technology.

ARTE 423 Practicum in the Secondary School I (3 credits)

Prerequisite: Fourth-year standing in the Specialization in Art Education, or permission of the Department. Student teachers observe and assist a secondary school art specialist in the development and implementation of an effective art programme during a practicum of 120 hours. Student teachers also observe the social and cultural dynamics of the school and initiate positive interactions with their students and professional colleagues.

ARTE 424 Art Education in the Secondary School II (3 credits)

Prerequisite: Fourth-year standing in the Specialization in Art Education and ARTE 422, or permission of the Department. The course concentrates on the objectives, goals, and content of the *MEQ Secondary School Curriculum Guidelines* in visual arts. Students analyse, reflect, and evaluate their own practice and philosophy of art learning and teaching

ARTE 425 Practicum in the Secondary School II (9 credits)

within the wider context of school and society.

Prerequisite: Fourth-year standing in the Specialization in Art Education and ARTE 423, or permission of the Department. This course is an extended teaching practicum in a secondary school of 300 hours. Student teachers implement curriculum planning and classroom management that respects ethnic, socio-economic, and cultural diversity, and that successfully integrates students with special needs. Student teachers also apply safe use of art materials and appropriate art learning assessment procedures.

ARTE 432 Community Art Education: Theory and Practice (3 credits)

Prerequisite: ARTE 330, or permission of the Department. Students connect theory and practice by planning and teaching appropriate art events for a particular community setting or population. Students investigate organizational and administrative approaches necessary for

ARTE 434 Professional Practice for Art Educators (3 credits)

successful community art education programming.

Prerequisite: ARTE 420 or 432, or permission of the Department. Students teach, develop, and then evaluate an art programme during a practicum of 60 hours in a community setting. Students formulate and express a philosophy of teaching community art education that connects theory, critical thinking, reflective practice and fieldwork experience. Students investigate entrepreneurial skills needed to market community art programmes. Specialization programme students must complete the practicum component teaching school-age children.

ARTE 498 Special Topics in Inter-Related Media and Technologies (3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. A course which provides an opportunity for the study of specialized aspects of art education. Topics chosen for consideration vary from year to year.

Art Therapy:

This course in Art Therapy is intended as part preparation for graduate study in this area.

ATRP 301 An Introduction to Art Therapy (3 credits)

Prerequisite: Second-year standing or equivalent and written permission from the Art Therapy Unit, PSYC 200 (or equivalent), Major in Art Education or 12 credits in Studio Art. Lectures, readings, and workshops which examine both the history and basic concepts of art therapy and their application.

81.50

ART HISTORY

Faculty

Chair LOREN LERNER, Associate Professor

Professors JEAN BELISLE SANDRA PAIKOWSKY WARREN SANDERSON Associate Professors JOAN ACLAND OLIVIER ASSELIN BRIAN FOSS CATHERINE MACKENZIE

Assistant Professor ANNE DUNLOP

Location

Sir George Williams Campus Visual Arts Building, Room: VA 432 (514) 848-4700

Department Objectives

Art History is important for both the student scholar and the student artist. An understanding of creative and visual responses to the world throughout the history of humankind gives students valuable perspectives on both their own work and on contemporary visual culture.

Art History is more than art appreciation. It is a lively, at times even controversial, discipline which invites investigation of the roles which intellectual, cultural, political, social, and economic factors play in defining the work of art and its subsequent reception. For this reason, students are encouraged to explore such disciplines as history, literature, philosophy, religion, women's studies and the social sciences, and are strongly advised to study languages appropriate to their interests. A programme carefully structured by the student and an adviser may open up for the art history graduate a future in a variety of fields — museums, galleries and libraries, conservation, education, journalism, and research.

The Department of Art History offers Major and Minor programmes, providing students with a solid, but individualized foundation in the critical issues involved in a full understanding of the work of art. Also available are the Major and Minor programmes in Art History and Studio Art which balance studio work with historical/theoretical studies.

Programmes

Students are responsible for satisfying their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

66 BFA Major in Art History

- 6 ARTH 284⁶ to be taken as first six credits in studies in Art History
- 6 Chosen from Group A
- 3 Group B: ARTH 360³, 361³, 362³
- 3 Group B: ARTH 363³, 364³, 365³
- 3 Group B: ARTH 366³, 367³, 368³
- 3 Group B: Art History electives
- 6 Chosen from Group C
- 6 Chosen from Group D
- 3 Chosen from Group E or Group F
- *27 Chosen from at least three Groups in Art History, in consultation with an assigned adviser

*Students may substitute credits from the Faculty of Fine Arts for up to 12 credits in Art History.

60 BFA Major in Art History and Studio Art

- 6 ARTH 284⁶ to be taken as first six credits in studies in Art History
- 6 Chosen from ARTH 433⁶, 434⁶ or Studio Art elective

- 6 Chosen from SFAR 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser
- 24 Art History electives*
- 8 Studio Art electives chosen from studio courses offered by the Departments of Design Art and Studio Arts

*ART 460 may be substituted for six credits in Art History.

30 Minor in Art History

- ARTH 284⁶ to be taken as first six credits in studies in Art History.
- 24 Art History electives chosen from at least three of the Groups in Art History, in consultation with an assigned adviser

30 Minor in Art History and Studio Art

- 6 ARTH 284⁶ to be taken as first six credits in studies in Art History
- 6 SFAR 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser
- 6-12 Art History electives
- 6-12 Studio Art electives

81.50.1 Admission to the Major and Minor in Art History and Studio Art There are no specific courses or procedures required for the Major and Minor in Art History other than the successful completion of a two-year pre-university cégep programme (or equivalent). In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Art History and Studio Art.

All applicants must submit a *portfolio* of their own work, as well as a *letter of intent* as part of the admission process. In addition to recommending admission to a programme, the Portfolio Evaluation Committee may recommend the completion of either SFAR 250, 260 or 270 as part of a student's programme

- 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums.
- Individual works must be labelled including applicant's name, date, size of work and medium(s) used.
- 4. Each portfolio must contain a list of contents including all the above information.
- 5 Works *larger than 20 x 24 inches (50 x 60 centimetres)* and three-dimensional works must be submitted in slide form.
- 6. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- 7. Out-of-town applicants may submit photographs and/or slides of their work. Return shipment of out-of-town portfolios is by prior arrangement only.

Portfolios are submitted to the Portfolio Evaluation Committee, Visual Arts Building, Room 237, between March 8 – 21, 2000.

	GROUPS:			
A — Media Based Studies	ARTH 261	Studies in Architecture (3 credits)	ARTH 352	Aspects of the History of Textile Art (3 credits)
	ARTH 262 ARTH 263	Studies in Drawing (3 credits) Studies in the Print (3 credits)	ARTH 353	Technology and Contemporary Art (3 credits)
	ARTH 264 ARTH 265	History of Ceramics (3 credits) History of Sculpture (3 credits)	ARTH 354 ARTH 433	Gesamtkunstwerk (3 credits) Materials and Methods in
	ARTH 266	History of Textile Art (3 credits)	ANTH 433	Three-Dimensional Art
	ARTH 349	Aspects of the History of the Print (3 credits)	ARTH 434	(6 credits) Materials and Methods in
	ARTH 350	Aspects of the History of		Drawing and Painting
	ARTH 351	Ceramics (3 credits) Aspects of the History of		(6 credits)
		Sculpture (3 credits)		
B — Period Studies	ARTH 270	Icons of Architectural History (3 credits)	ARTH 365	Aspects of Seventeenth- and Eighteenth-Century Western Art
	ARTH 360	Aspects of Ancient Greek Art	ARTH 366	and Architecture (3 credits)
	ARTH 361	and Architecture (3 credits) Aspects of Ancient Roman Art and Architecture (3 credits)	AKIN 300	Aspects of Nineteenth-Century Western Art and Architecture (3 credits)
	ARTH 362	Aspects of Early Christian and Byzantine Art and Architecture	ARTH 367	Aspects of Twentieth-Century Art and Architecture (3 credits)
		(3 credits)	ARTH 368	Aspects of Contemporary Art
	ARTH 363	Aspects of Medieval Art and Architecture (3 credits)	ARTH 498	and Architecture (3 credits) Special Topics in the History of
	ARTH 364	Aspects of Fifteenth- and Sixteenth-Century European Art and Architecture (3 credits)		Art and Architecture (3 credits)
C — Art in Canada	ARTH 370	Aspects of Canadian Art (3 credits)	ARTH 374	Architecture and Urbanism in Montréal (3 credits)
	ARTH 371	Aspects of Canadian	ARTH 375	Issues in the Montréal Art
	ARTH 372	Architecture (3 credits) Issues in Contemporary Canadian Architecture	ARTH 376	Milieu (3 credits) Topics in Amerindian and Inuit Art (3 credits)
	ARTH 373	(3 credits) Issues in Contemporary Canadian Art (3 credits)		

D — Methodology	ARTH 283 ARTH 284 ARTH 290 ARTH 298 ARTH 379	The Life and Work of (3 credits) Methods of Art History (6 credits) Art History and Archaeology (3 credits) Special Topics in Genre Studies (3 credits) Post-Colonial Theory in Art History (3 credits)	ARTH 380 ARTH 381 ARTH 388 ARTH 400	Historiography and Art History (3 credits) Feminism and Art History (3 credits) Narration and Art (3 credits) Advanced Seminar in Art Historical Method (3 credits)
E — Theory and Criticism	ARTH 383 ARTH 384 ARTH 385 ARTH 386	Art and Philosophy (3 credits) Theories of Representation (3 credits) Colour: Theory and Application in the Visual Arts (3 credits) The Art Object and the Viewer (3 credits)	ARTH 387 ARTH 389	Seminar in Art and Criticism (3 credits) Issues in Ethnocultural Art Histories (3 credits)
F – Art and Society	ARTH 390 ARTH 391 ARTH 392	Art Institutions (3 credits) Art and its Changing Contexts (3 credits) Gender Issues in Art and Art History (3 credits)	ARTH 393 ARTH 398	Art and Replication (3 credits) Special Topics in Art and Society (3 credits)
G — Tutored Studies	ARTH 394 ARTH 395	Intensive Study in Art History I (1.5 credits) Intensive Study in Art History II (1.5 credits)	ARTH 401	Independent Studies in Art History (3 credits)
Courses	ARTH 261 Studies in Architecture (3 credits) The role and implications of selected materials and technology in architecture. ARTH 262 Studies in Drawing (3 credits) Drawing as an art form and its relation to other arts. NOTE A/See §200.3 ARTH 263 Studies in the Print (3 credits) A selective examination of the development and uses of the print as an art form or a medium in		ARTH 270 Cons of Architectural History (3 credits) A study of key buildings of civilization in relation to the specific vocabulary of architecture, its techniques and conditions of construction. Consideration is given as to how and why these buildings have become icons in particular societies. ARTH 283 The Life and Work of (3 credits) A critical examination of the relationship of	
	Western and n NOTE A/See § ARTH 264 A selective exauses of ceram	Mistory of Ceramics (3 credits) amination of the development and ics as an art form or a medium in non-Western traditions.	accounts of ar her or his work ARTH 284 An introduction	artist's life to an interpretation of
	ARTH 265 A selective exa	History of Sculpture (3 credits) amination of the development and ure as an art form or a medium in	art history and systems of cla periodization,	Art History and Archaeology (3 credits) n of the interrelationship between archaeology as manifested in ssification, interpretation, stratification, as well as the series and fragments.

ARTH 266 History of Textile Art
(3 credits)
A selective examination of the development of

textile art in the Western and non-Western

traditions. NOTE A/See §200.3

ARTH 298 Special Topics in Genre Studies (3 credits)
Topics pertaining to categories of subject matter

474 . ART HISTORY

such as landscape, portraiture, and still life. NOTE C/See §200.3

ARTH 349 Aspects of the History of the Print (3 credits)

An examination of selected subjects in the history of the print.

ARTH 350 Aspects of the History of Ceramics (3 credits)

An examination of selected subjects in the history of ceramics. NOTE A/See §200.3

ARTH 351 Aspects of the History of Sculpture (3 credits)

An examination of selected subjects in the history of sculpture.

ARTH 352 Aspects of the History of Textile Art (3 credits)

An examination of selected subjects in the history of textile art. NOTE A/See §200.3

ARTH 353 Technology and Contemporary Art (3 credits)

A selective examination of the dynamics of the relationship between technology and contemporary art.

ARTH 354 Gesamtkunstwerk (3 credits)

A selective examination of art which utilizes a number of media. The relationship to work in a single medium and historical concepts of multi-media are examined.

ARTH 360 Aspects of Ancient Greek Art and Architecture (3 credits)

Selected subjects examined in relation to predominant characteristics of Ancient Greek art. NOTE A/See §200.3

ARTH 361 Aspects of Ancient Roman Art and Architecture

(3 credits)

Selected subjects examined in relation to predominant characteristics of Ancient Roman art. NOTE A/See §200.3

ARTH 362 Aspects of Early Christian and Byzantine Art and

Architecture (3 credits)

Selected subjects examined in relation to predominant characteristics of Early Christian and Byzantine art. NOTE A/See §200.3

ARTH 363 Aspects of Medieval Art and Architecture (3 credits)

Selected subjects examined in relation to predominant characteristics of Medieval art. NOTE A/See §200.3

ARTH 364 Aspects of Fifteenth- and

Sixteenth-Century European Art and Architecture

(3 credits)

Selected subjects examined in relation to

predominant characteristics of fifteenth- and sixteenth-century European art. NOTE A/See §200.3

ARTH 365 Aspects of Seventeenth- and Eighteenth-Century Western Art and Architecture

(3 credits)

Selected subjects examined in relation to predominant characteristics of seventeenth- and eighteenth-century Western art.

NOTE A/See §200.3

ARTH 366 Aspects of Nineteenth-Century Western Art and

Architecture (3 credits)

Selected subjects examined in relation to predominant characteristics of nineteenth-century Western art. NOTE A/See §200.3

ARTH 367 Aspects of Twentieth-Century Art and Architecture

(3 credits)

Selected subjects examined in relation to predominant characteristics of twentieth-century art. NOTE A/See §200.3

ARTH 368 Aspects of Contemporary Art and Architecture (3 credits)

Selected subjects examined in relation to predominant characteristics of contemporary art. NOTE A/See §200.3

ARTH 370 Aspects of Canadian Art (3 credits)

Selected subjects examined in relation to predominant characteristics of art in Canada. NOTE A/See §200.3

ARTH 371 Aspects of Canadian Architecture (3 credits)

Selected subjects examined in relation to predominant characteristics of architecture in Canada. NOTE A/See §200.3

ARTH 372 Issues in Contemporary Canadian Architecture

(3 credits)

A consideration of specific questions relevant to the current status and practice of architecture in Canada.

ARTH 373 Issues in Contemporary Canadian Art (3 credits)

A consideration of specific questions pertinent to contemporary art in Canada. NOTE A/See §200.3

ARTH 374 Architecture and Urbanism in Montréal (3 credits)

The relationship of architecture to issues of urbanism, analysed through examples from Montréal's past and/or present.

ARTH 375 Issues in the Montréal Art Milieu (3 credits)

An analysis of specific artistic phenomena or events in Montréal.

ARTH 376 Topics in Amerindian and Inuit Art (3 credits)

A detailed examination of aspects of the art of the indigenous peoples of Canada.

ARTH 379 Post-Colonial Theory in Art History (3 credits)

A critical examination of the impact of colonialism upon art and art history, and of the key concepts of post-colonial art and theory. NOTE: It is strongly recommended that students take at least six credits in Art History courses before enrolling in this course.

ARTH 380 Historiography and Art History (3 credits)

The history of art history as a discipline and the concepts of history it uses.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 381 Feminism and Art History

(3 credits)

A consideration of the effects of feminism on art history since the late 1960's.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 383 Art and Philosophy (3 credits)

A consideration of the impact of Western philosophy on art theory and practice.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 384 Theories of Representation (3 credits)

An examination of the different concepts of representation involved in the process of creating an art object, taking into account the relationships among image, referent, artist and audience.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 385 Colour: Theory and Application in the Visual Arts (3 credits)

An examination of various theories of colour as posited by artists, philosophers, psychologists, and scientists. The relationship of such theories to the visual arts constitute an essential concern of the course.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 386 The Art Object and the Viewer (3 credits)

A consideration of such questions as how a work of art addresses the viewer, what types of viewer (generic or individual) it postulates, and what theories of perception (spatial, kinaesthetic, or psychological) are involved in explaining the

process of experiencing an art object.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 387 Seminar in Art and Criticism (3 credits)

Prerequisite: Twelve credits in Art History, or written permission of the Department of Art History. An examination of selected aspects of the relationship between art and criticism. NOTE A/See §200.3

ARTH 388 Narration and Art (3 credits) A critical examination of given aspects of the relationship between an image and its external references. NOTE A/See §200.3 NOTE: It is strongly recommended that students follow at least six credits in Art History courses

ARTH 389 Issues in Ethnocultural Art Histories (3 credits)

before enrolling in this course.

Analyses of the conceptualization of ethnic and cultural identity in art and art history.

ARTH 390 Art Institutions (3 credits)

A study of selected institutions of art from a historical perspective. Consideration is given to the interrelationship of the institution and the milieu in which art is defined, made, exhibited, or purchased.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 391 Art and its Changing Contexts (3 credits)

An investigation of the factors which define the initial context of a work of art and of those which modify or eclipse an original context. NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 392 Gender Issues in Art and Art History (3 credits)

An examination of gender as a factor in making and interpreting art.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 393 Art and Replication (3 credits)

An examination of various methods of replicating art (drawing, painting, printing, casting, photographing) and their relation to the original. Special consideration is given to the effects of the "copy" on art education, aesthetics, technique, patronage, and the market. NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 394 Intensive Study in Art History I (1.5 credits)

Prerequisite: Written permission of the

Department of Art History. An intensive course of study designed to take advantage of the presence of a visiting scholar or the occurrence of a special event.

ARTH 395 Intensive Study in Art History II (1.5 credits)

Prerequisite: Written permission of the Department of Art History. An intensive course of study designed to take advantage of the presence of a visiting scholar or the occurrence of a special event. NOTE C/See §200.3

ARTH 398 Special Topics in Art and Society (3 credits)

Prerequisite: Twelve credits in Art History, or written permission of the Department of Art History. A course designed to permit a detailed examination of some aspects of art in society. NOTE C/See §200.3

Advanced Seminar in Art **ARTH 400** Historical Method (3 credits)

Prerequisite: Third-year* standing in the Major in Art History. A seminar designed to permit an indepth examination of some aspects of methodology relevant to art history.

NOTE A/See §200.3

*fewer than 33 credits remaining in degree programme.

ARTH 401 Independent Studies in Art **History** (3 credits)

Prerequisite: Third-year* standing in the Major in Art History, and written permission of the Department of Art History. Students are required to prepare a research paper under the supervision of a faculty member. NOTE A/See §200.3 *fewer than 33 credits remaining in degree programme.

Materials and Methods in **ARTH 433** Three-Dimensional Art

(6 credits)

Through a series of lectures, practical

demonstrations, and special projects in threedimensional art, this course familiarizes the student with selected historical and contemporary principles, processes, and materials of concern to the artist. NOTE A/See §200.3

NOTE: Credits for this course may not be applied towards fulfilling art history requirements in the programmes in Art Education, Ceramics, Design Art, Fibres, Painting and Drawing, Photography, Print Media, Sculpture, Studio Art. NOTE: Students who have received credit for ARTH 268 may not take this course for credit.

ARTH 434 Materials and Methods in **Drawing and Painting**

(6 credits)

Prerequisite: Enrolment in the Major/Minor in Art History or the Major in Art History and Studio Art, or written permission of the Department of Art History. Through a series of lectures, practical demonstrations, and special projects in the media of drawing and painting, this course familiarizes the student with some of the historical materials, techniques, and other aspects of the artist's concern. NOTE: Credits for this course may not be

applied towards fulfilling art history requirements in the programmes in Art Education, Ceramics, Design Art, Fibres, Painting and Drawing, Photography, Print Media, Sculpture, Studio Art. NOTE: Students who have received credit for ARTH 267 or ARTH 234 or ART 420 may not take this course for credit.

ARTH 498 Special Topics in the History of Art and Architecture (3 credits)

Prerequisite: Eighteen credits in Art History, or written permission of the Department of Art History. A course for advanced students which provides for the study of more specialized areas of art. NOTE A/See §200.3

81.60 MEL HOPPENHEIM SCHOOL OF CINEMA

Faculty

PETER RIST, Associate Professor

Professors MARIO FALSETTO ANDRÉ HERMAN JOHN LOCKE THOMAS WAUGH CAROLE ZUCKER

Associate Professors STEFAN ANASTASIU CHRISTOPHER HINTON RICHARD KERR LOUISE LAMARRE MARTIN LEFEBVRE MARJORIE MORTON MARIELLE NITOSLAWSKA CATHERINE RUSSELL

Assistant Professors CILIA SAWADOGO DON TERRY

Location

Sir George Williams Campus Faubourg Building, Room: FB 319 (514) 848-4666

Department **Objectives**

Education in Cinema is the mission of the School. This implies an ongoing effort to maintain the highest standards for the curriculum, faculty, staff, facilities, and services on the undergraduate and graduate levels. It also implies that there must be an effort to create an optimal learning environment for students who not only attend lectures but also make films and study completed films as central components of their education at Concordia. Recognizing the complexity of the assignments given to students, faculty and staff expertise and accessibility become crucial. Conjointly, the continuing faculty research, which both enriches the education of the students and contributes to the field of cinema, has to be given a place of importance. Successfully balancing the desire to provide individual and small group instruction to a large number of highly motivated students with the need to provide the time required for faculty research is a priority for the School. All aspects of the School's mission are to be carried out with respect for humanistic values, justice, and human rights.

Programmes

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20. The superscript indicates credit value.

BFA Specialization in Film Production

NOTE: It is strongly recommended that students in the Specialization in Film Production have, or acquire, a knowledge of French.

- *12
- FMST 211⁶, 212⁶ FMPR 231⁶, 332⁶, 432⁶ FMPR 242³, 339³, 342³, 450³
- Chosen from FMPR 3343, 3353, 3413, 343³, 350³, 398³, 435³, 438³, 439³, 440³, 441³, 442³, 498³
- Film Studies electives** (excluding FMST 200)
- Cinema electives** **** or credits outside of Cinema selected in consultation with the head of Film Production

BFA Specialization in Film Studies

NOTE: It is strongly recommended that students in the Specialization in Film Studies have, or acquire, a knowledge of French.

FMST 211⁶, 212⁶, 321⁶, 322⁶

- Chosen from FMST 214³, 215³, 418³, 4193***
- FMPR 2316 or Cinema electives**** approved by the head of Film Studies
- FMST 450³ 3
- 21 Film Studies electives** (excluding FMST 200); FMPR 3343, 3413, 4413
 - Film Studies seminar credits chosen in consultation with an adviser

48 **BFA Major in Film Production**

- FMST 2116, 2126 *12
- FMPR 231⁶, 242³, 332⁶, 342³ 18
- Film Studies elective(s)** (excluding 6 FMST 200)
- Cinema electives** **** 12

54 **BFA Major in Film Animation**

- FMAN 202⁶, 214⁶ 12
- FMAN 212³; FMST 323³ 6
- FMAN 303⁹, 326³; or FMAN 304⁹, 319³ 12
- FMAN 315³, 324⁶ q
- 9 FMAN 4029
- Film Studies electives****

48 BFA Major in Film Studies

- *24 FMST 2116, 2126, 3216, 3226
- 18 Film Studies electives** (excluding FMST 200)
- 6 Cinema electives** ****

30 Minor in Cinema

- 12 FMST 211⁶, 212⁶
- 18 Film Studies electives** (With the written permission of the School, introductorylevel Film Animation or Film Production courses, selected in consultation with the School, may be substituted.)

This is a very limited enrolment programme for students who want to have some access to Film Production and Film Animation courses. This Minor cannot be combined with the Minor in Film Animation or the Minor in Film Studies to form a Double Minor programme.

30 Minor in Film Animation

- 15 FMAN 202⁶, 303⁹
- 6 FMAN 214⁶
- 6 FMAN 212³; FMST 323³
- 3 Cinema electives

This Minor cannot be combined with the Minor in Cinema or the Minor in Film Studies to form a Double Minor programme.

24 Minor in Film Studies

- 12 Chosen from FMST 200⁶, 211⁶, 212⁶
- 12 Film Studies electives**

This Minor cannot be combined with a second Faculty of Fine Arts Minor to form a BFA Double

Minor programme. It is primarily intended for students outside the Faculty of Fine Arts. Students in Communication Studies Department degree programmes must have written permission of their Department to enter this programme. NOTES:

*FMST 211 and 212 should be taken as part of the first 30 credits.

**In the Major and Specialization in Film
Production, and the Major and Specialization in
Film Studies, up to 12 credits chosen from the
following courses in the Faculty of Arts and
Science may be applied as Film Studies or
Cinema electives for degree purposes:
Communication Studies listed in §81.60.3;
Français 373, 374. In the Minor in Cinema and
the Minor in Film Studies, up to six credits
chosen from the following courses in the
Faculty of Arts and Science may be applied as
Film Studies elective(s) for degree purposes:
Communication Studies listed in §81.60.3;
Français 373, 374.

***Communication Studies 303 may be substituted for three credits in Film Studies and must be considered as Film Studies credits for degree purposes.

****In the Specialization in Film Production, the Specialization in Film Studies, and all Cinema Major programmes, the following courses may be applied as Cinema electives for degree purposes: VDEO 300, VDEO 350.

81.60.1 Admission to Cinema Programmes The Mel Hoppenheim School of Cinema has distinct admission procedures in addition to the normal admission process of Concordia University. While all applicants are required to submit a *portfolio* and a *letter of intent*, an *interview* may also be required depending upon the Cinema concentration chosen.

In order to allow themselves sufficient preparatory time, applicants are strongly encouraged to contact the School in January for detailed information regarding these requirements as well as for submission deadline dates.

NOTE: The Specialization in Film Production is offered at the third-year level. Upon attainment of third-year standing (33 or fewer credits remaining to be completed in the programme), students in the Major in Film Production may apply for transfer to the Specialization in Film Production.

Courses

Film Studies:

FMST 200 Introduction to Film Studies (6 credits)

A survey acquainting the student with the art of the film. The technical and critical terminology of film studies is discussed. Popular literature on film, such as reviews, is analysed and the more specialized film literature is introduced. Directors whose films are usually viewed include Bergman, Eisenstein, Fellini, Ford, Hitchcock, Kurosawa, Lubitsch, Keaton, and Welles. Weekly screenings. NOTE A/See §200.3

FMST 211* History of Film to 1959 (6 credits)

The evolution of the forms and themes of world cinema from its origin to 1959, in relation to its cultural, social, and political contexts. Special

emphasis is placed on film historical methodology, focusing on approaches based on genre, auteur, national cinemas, social history, particular cinematic modes, or other frameworks. Weekly screenings. NOTE A/See §200.3

*Students in Cinema programmes who require FMST 211 should complete the course as part of their first 30 credits.

FMST 211* L'histoire du cinéma jusqu'à 1959 (6 crédits)

Ce cours couvre l'évolution des formes et des thématiques cinématographiques depuis leur début jusqu'à 1959 et les place dans leur contexte culturel, social et politique. L'accent est mis principalement sur la méthodologie de l'histoire du cinéma tout en privilégiant plusieurs angles d'approche: genre, cinéma d'auteur, cinéma national, histoire sociale, forme cinématographique particulière ou d'autres grilles. Visionnements hebdomadaires. NOTE A/Voir §200.3

*Si ce cours figure au programme d'une personne inscrite en Cinéma, il devrait faire partie des 30 premiers crédits.

FMST 212* Film Aesthetics (6 credits)
A study of the aesthetics of film. Topics include film criticism, theories about the fundamental elements of film, and comparisons between films which do not depend on their date of production. Problems of film description, interpretation, and evaluation are discussed. Weekly screenings. NOTE A/See §200.3 *Students in Cinema programmes who require FMST 212 should complete the course as part of their first 30 credits.

FMST 214 English-Canadian Film (3 credits)

A survey of English-Canadian film from the earliest surviving works to the present. Topics include fictional, documentary, animated, and experimental film, and the role of the National Film Board is discussed. Weekly screenings. NOTE A/See §200.3

FMST 215 Le cinéma québécois (3 crédits) Revue des films québécois, mettant principalement l'accent sur les œuvres contemporaines. Les aspects culturels et politiques particuliers de ces films sont examinés. La structure de l'industrie cinématographique du Québec et le rôle de l'Office national du film y sont traités particulièrement. Visionnements hebdomadaires. NOTE A/Voir §200.3

FMST 217 First Nations and Film (3 credits)

A survey of representation by and of aboriginal peoples in film and video. The emphasis is on the Americas, but important works from other continents are included. Films and videotapes, both mainstream and experimental, are discussed in the context of contemporary aesthetic issues, socio-cultural history, and post-colonial theory. Weekly screenings.

NOTE: Students who have received credit for FMST 398H may not take this course for credit.

FMST 311 *Montage Aesthetic* (3 credits) Prerequisite: FMST 212. An intensive study of montage as an element of film style. Beginning with the work of D.W. Griffith, developments in film editing are followed through French Avant-Garde and Russian films of the 1920's to contemporary film. Weekly screenings.

FMST 312 Moving Camera Aesthetic (3 credits)

Prerequisite: FMST 212. An intensive study of camera movement as an element of film style. Consideration is given to relations between long takes, deep-focus cinematography, and camera movement, as well as to the role of camera

movement in creating the signification of film. Films by Murnau, Renoir, Welles, Ophuls, and Snow are included among those viewed and discussed. Weekly screenings.

FMST 313 Film Comedy I (3 credits)
Prerequisite: Second-year standing.* An
introduction to film comedy in the silent and
sound eras. The visual and verbal sources of
comedy are analysed through the study of films
ranging from Mack Sennett and Buster Keaton
to Woody Allen and Jacques Tati. Weekly
screenings.

*66 or fewer credits remaining in degree programme.

FMST 318 Experimental Film (3 credits) Prerequisite: Second-year standing.* An examination of experimental film emphasizing developments from the late forties to the present. The New American Cinema is considered in relation to other North American and European experimental cinemas, and examples of the historical antecedents of recent experimental films are viewed and discussed. Weekly screenings. *66 or fewer credits remaining in degree programme.

FMST 321 Studies in Film Directors (6 credits)

Prerequisite: FMST 211 or second-year standing*. A concentrated study of the work of several major directors, principally narrative, from different periods in film history. Each director's work is examined in detail with representative films from distinct periods. The films are considered in terms of thematic and stylistic consistency and variation as well as biographical, social, and political factors. Weekly screenings. NOTE A/See §200.3 *66 or fewer credits remaining in degree programme.

FMST 322 History of Film since 1959 (6 credits)

Prerequisite: FMST 211 or second-year standing*. A cross-cultural historical examination of selected aspects of world cinema since 1959, including trends in documentary and experimental film. The principal focus on European and American cinema is contextualized through reference to Canadian, Japanese, and Third World film. A range of perspectives is introduced, including genre and auteur study, formal analysis, and feminist analysis. Films are studied in their political and cultural contexts. Weekly screenings. NOTE A/See §200.3
*66 or fewer credits remaining in degree programme.

FMST 323 History of Animated Film (3 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation, or second-year standing*. A survey of animated film from the first decade of the twentieth century to the present. Styles of animation ranging from abstract experimental film of the 1920's, to the Disney Studio, to computer animation are viewed and discussed. The contribution of the National Film Board of Canada and particularly that of Norman McLaren is considered. Weekly screenings. NOTE A/See §200.3

*66 or fewer credits remaining in degree programme.

FMST 323 Histoire du cinéma d'animation (3 crédits)

Préalable: Inscription à la majeure en Cinéma d'animation ou la mineure en cinéma d'animation, ou niveau de scolarité de la deuxième année*. Aperçu général du film d'animation depuis la première décennie du vingtième siècle, jusqu'à nos jours. Les styles d'animation, du film expérimental abstrait des années 20 au Studio Disney, et à l'animation par ordinateur, sont présentés et étudiés. Est traité aussi l'apport de l'Office national du film, en particulier celui de Norman McLaren. Visionnements hebdomadaires. NOTE A/Voir §200.3

*66 crédits ou moins à obtenir dans un programme conduisant à un diplôme.

FMST 324 Film Script Analysis (3 credits)
Prerequisite: Second-year standing* and six
credits in Film Studies. A study of the film script
both as a basis for the construction of a film and
as an identifiable component of film with its own
history and value. Examples from film history as
well as the work of major scriptwriters are
analysed in their written form and through film
screenings. The stages of script development
from story idea through shooting script are
discussed.

*66 or fewer credits remaining in degree programme.

FMST 324 Analyse de scénarios (3 crédits)

Préalable: Niveau de scolarité de la deuxième année* et six crédits en études cinématographiques. Étude de scénarios sur deux plans: d'une part canevas du film et d'autre part élément identifiable ayant une histoire et une valeur propre. Analyse d'exemples tirés de l'histoire du cinéma et de l'oeuvre des plus grands scénaristes, à l'aide des textes eux-mêmes et de visionnements. Les diverses étapes de rédaction du scénario depuis l'idée de départ jusqu'au découpage sont étudiées.
*66 crédits ou moins à obtenir dans un programme conduisant à un diplôme.

FMST 325 Film Acting (3 credits)

Prerequisite: Second-year standing.* A study of film acting centred on examining performances and individual scenes from films. Among the issues studied are the creation of star personas, casting against type, the influence of the script

in the performance, the use of improvisation, the gesture system in silent film acting, ensemble acting, stylization, and exaggeration. Weekly screenings. NOTE A/See §200.3 *66 or fewer credits remaining in degree programme.

FMST 327 Third World Film (3 credits)
Prerequisite: Second-year standing.* A survey
of Third World films seen in relation to their
cultural, political, and aesthetic environment.
Films are selected from areas such as Latin
America, the Caribbean, Africa, the Middle East,
South and East Asia. Weekly screenings.
*66 or fewer credits remaining in degree
programme.

FMST 327 Cinéma du Tiers-Monde (3 crédits)

Préalable: Niveau de scolarité de la deuxième année.* Revue des films du Tiers-Monde dans leur cadre culturel, politique et esthétique. Les films choisis viennent d'Amérique latine, des Antilles, d'Afrique, du Moyen-Orient, d'Asie du Sud et de l'Est. Visionnements hebdomadaires. *66 crédits ou moins à obtenir dans un programme conduisant à un diplôme.

FMST 328 Non-fiction Film Since 1956 (3 credits)

Prerequisite: Second-year standing*. A cross-cultural survey of contemporary developments in the documentary film. The course begins with the precursors of *cinéma-direct* in North America and Europe during the fifties, and extends through the most recent applications of *cinéma-direct* in the emerging cinemas of the Third World. Emphasis is placed on both the artistic achievement and the theoretical, cultural, and political context of the non-fiction film during this period of technological and aesthetic transition. Weekly screenings.

*66 or fewer credits remaining in degree programme.

FMST 328 Le documentaire depuis 1956 (3 crédits)

Préalable: Niveau de scolarité de la deuxième année*. Revue pan-culturelle des progrès actuels du documentaire. Le cours va de l'étude des précurseurs du cinéma direct en Amérique du Nord et en Europe durant les années 50 aux plus récentes applications chez les cinémas naissants des pays du Tiers-Monde. L'accent est mis sur l'aspect artistique et le contexte théorique, culturel et politique du documentaire durant cette période de transition technologique et esthétique. Visionnements hebdomadaires. *66 crédits ou moins à obtenir dans un programme conduisant à un diplôme.

FMST 329 *Women and Film* (3 credits) Prerequisite: FMST 211 or second-year standing*. An examination of films made by women, film criticism written by women, and the portrayal of women in films. These topics are considered within the context of film history and with an emphasis on their relation to ideas in contemporary feminist theory. Weekly screenings. NOTE A/See §200.3
*66 or fewer credits remaining in degree programme.

FMST 332 Issues in Independent Cinema (3 credits)

Prerequisite: FMST 211 or second-year standing*. An intensive study of selected tendencies in cinema produced outside the mainstream of the film industry. Topics may include documentary, video art, experimental or narrative film, or particular convergences of these modes of film practice. Topics will vary according to the instructor's specialization. NOTE A/See §200.3

*66 or fewer credits remaining in degree programme.

NOTE: Students who have received credit for FMST 331 may not take this course for credit without permission from the School.

FMST 335 Aspects of National Cinemas (3 credits)

Prerequisite: Second-year standing.* An examination of films as reflections of national cultures. Films by a range of directors representing one or several national groupings such as Japan, Brazil, Eastern Europe, Great Britain, or contemporary West Germany are discussed in the context of their aesthetic, cultural, and political aspirations. Weekly screenings. NOTE A/See §200.3

*66 or fewer credits remaining in degree programme.

FMST 337 Topics in American Cinema (3 credits)

Prerequisite: Second-year standing.* A lecture or seminar course which provides an opportunity for the study of limited and more specialized aspects of U.S. cinema. Topics may include individual genres, directors, production studios, historical periods, or aspects of independent cinema. Topics vary from year to year according to the instructor's field of specialization. *66 or fewer credits remaining in degree programme.

FMST 392 Representation and Sexuality: Queer Cinema I (3 credits)

An interdisciplinary, cross-cultural survey of queer cinema and video. Selected phases in the historical trajectory of lesbian and gay film are highlighted, both underground and mainstream, including studies of representative major artists from Jean Cocteau and Dorothy Arzner to Patricia Rozema and Derek Jarman. Problems in the depiction of sexual minorities are analysed, and a selection of the principal aesthetic, theoretical and socio-political issues raised by queer theory and cultural production is introduced. NOTE A/See §200.3

FMST 393 Representation and Sexuality: Queer Cinema II (3 credits)

Prerequisite: FMST 392. An extension of FMST 392. An in-depth focus on selected historical, aesthetic, and theoretical issues, which vary from year to year according to the expertise of faculty. NOTE A/See §200.3

FMST 398 Special Topics in Film Studies (3 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of limited and more specialized aspects of film studies. NOTE C/See §200.3

FMST 399 Special Topics in Film Studies (6 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of specialized aspects of film studies outside the scope of existing courses. NOTE C/See §200.3

FMST 409 Seminar in Women and Film (3 credits)

Prerequisite: Written permission of the School of Cinema. An advanced course in the study of films made by women, as well as of the representation of women in films. The topics selected for study may vary from year to year and are considered within the context of film history, contemporary feminist philosophy, and feminist film theory. Students are expected to conduct independent research for class presentation. *NOTE A/See §200.3*

FMST 411 Advanced Studies in Film Genres (3 credits)

Prerequisite: Second-year standing*; FMST 211 or 322 or COMS 310. An intensive analysis of one or two film genres, which assumes previous experience in film-genre studies. The genre is discussed in terms of its structural characteristics and the ways in which it is a product of specific social situations. Weekly screenings. *66 or fewer credits remaining in degree programme.

FMST 413 *Film Comedy II* (3 credits) Prerequisite: FMST 313 or COMS 310 or written permission of the School of Cinema. A continuation of FMST 313 on a more advanced level. Emphasis is placed on theoretical aspects of film comedy and the films of several major comedy directors. Weekly screenings.

FMST 414 Seminar in Film Directors (3 credits)

Prerequisite: Eighteen credits in Film Studies and written permission of the School of Cinema. A seminar for advanced students which provides for more concentrated study of the work of specific film directors. The director or directors whose films are chosen for study varies from year to year according to the instructor's field of specialization. NOTE C/See §200.3

FMST 416 Seminar in Problems in Film History (3 credits)

Prerequisite: Eighteen credits in Film Studies and written permission of the School of Cinema. A seminar for advanced students which provides for the study of limited and more specialized areas of film history. The areas chosen for study vary from year to year according to the instructor's field of specialization. NOTE C/See §200.3

FMST 418 Seminar in English-Canadian Film (3 credits)

Prerequisite: FMST 214 or COMS 316, and written permission of the School of Cinema. A seminar in which selected aspects of English-Canadian film are examined and discussed. The areas chosen for study vary from year to year according to the instructor's field of specialization.

FMST 419 Séminaire sur le cinéma québécois (3 crédits)

Préalable: FMST 215 ou COMS 316, ainsi que permission écrite de l'École de cinéma. Un séminaire dans lequel des aspects sélectifs du cinéma québécois sont analysés et discutés. Les sujets d'étude choisis varient d'année en année selon la spécialisation de l'instructeur.

FMST 422 Seminar in Film Theory and Criticism (3 credits)

Prerequisite: FMST 212 and written permission of the School of Cinema. Theories including those of Sergei Eisenstein and André Bazin are studied both as explanations of the effects of films and as foundations for film criticism. The relation of contemporary theoretical writings, such as those in film semiology, to film criticism is discussed. Weekly screenings.

FMST 423 Seminar in Comparative Stylistic and Formal Analysis (3 credits)

Prerequisite: Written permission of the School of Cinema. An intensive course in the analysis of film style. Films are examined using an analytical projector in order to discover their formal and thematic structures. The contribution of cinematographers, editors, scriptwriters, directors, and performers to the development of a style are discussed. Weekly screenings.

FMST 424 Seminar in Film Narrative (3 credits)

Prerequisite: Written permission of the School of Cinema. An examination of conventions of film narrative from a theoretical and historical point of view. Innovations in narrative structure are discussed and consideration is given to the origin, development, and transformation of narrative traditions in their cultural and aesthetic context.

FMST 425 Seminar in Contemporary Film Theory (3 credits)

Prerequisite: Written permission of the School of Cinema. A survey and analysis of major recent

theoretical approaches to film. Among the topics discussed are auteurism, semiotics, textual analysis, ideological criticism, psychoanalysis, feminism, and neo-formalism. The seminar includes screenings, discussions of weekly readings, and oral presentations by the students. NOTE A/See §200.3

FMST 426 Professional Internship I (3 credits)

Prerequisite: Second-year standing* in the Major in Film Studies or the Specialization in Film Studies; written permission of the School of Cinema. A Film Studies student who has been commissioned to work in such areas as film research, archival work, editing film publications, or writing film criticism, may seek permission to apply three credits towards the Film Studies degree programme. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. NOTE A/See §200.3 *66 or fewer credits remaining in degree

programme.

FMST 427 Professional Internship II (3 credits)

Prerequisite: Second-year standing* in the Major in Film Studies or the Specialization in Film Studies; written permission of the School of Cinema. A student repeating FMST 426 registers for credit under FMST 427. NOTE A/See §200.3 *66 or fewer credits remaining in degree programme.

FMST 428 Independent Study I (3 credits) Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student may explore a specific area of film studies.

FMST 429 Independent Studies II (3 credits)

Prerequisite: Written permission of the School of Cinema. A student repeating FMST 428 registers for credit under FMST 429 provided the subject matter is different.

FMST 450 Film Studies Specialization Seminar (3 credits)

Prerequisite: Second-year standing* in the Specialization in Film Studies; written permission of the School of Cinema. This intensive seminar includes workshops in research methodology, in advanced study and career planning, and in the practice of criticism, publication, preservation, and programming. The relation of film studies to filmmaking practice, the role of changing technology, and the current cultural context of the discipline are discussed by visiting experts from both within the University and the community at

large. The course brings together all students in the Specialization in Film Studies. *66 or fewer credits remaining in degree programme

FMST 498 Special Topics in Film Studies (3 credits)

Prerequisite: Written permission of the School of Cinema. A lecture or seminar course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film studies.

NOTE A,C/See §200.3

Film Animation:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.60.2

FMAN 202 Animation I (6 credits)
Prerequisite: Enrolment in the Major in Film
Animation or the Minor in Film Animation; or
written permission of the School of Cinema, with
either FMPR 231 or six credits in a Studio Art
course. A studio course introducing the study
and practice of film animation. Students will be
taught the fundamentals of motion analysis and
frame-by-frame filmmaking, basic character
animation, camera layouts, exposure sheets and
character design. NOTE A/See §200.3
NOTE: Students are required to bear the cost of
film stock, processing, printing, and other
materials.

FMAN 212 Animation Aesthetics (3 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; or written permission of the School of Cinema. Film Studies for Animation students: an introduction to the theory and aesthetics of film animation.

FMAN 214 Technical Aspects of Film Animation (6 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; written permission of the School of Cinema. An intensive hands-on seminar/workshop in which principles and techniques of photographic and motion picture arts are applied to animation filmmaking. Students will be introduced to cameras (photographic processes), filmstocks, editing equipment, sound synchronization, the rotoscope and the optical printer.

NOTE A/See §200.3

FMAN 303 Animation II: Classical (9 credits)

Prerequisite: Second-year standing* in the Major in Film Animation or in the Minor in Film Animation; FMAN 202; written permission of the School of Cinema. A continuation on a more advanced level of FMAN 202. In a continued introduction to filmmaking, students will learn

narrative structure and sound conception in film. NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Students who have received credit for FMAN 302 or 313 may not take this course for credit.

*66 or fewer credits remaining in degree programme.

FMAN 304 Animation II: Digital (9 credits)
Prerequisite: Second-year standing* in the
Major in Film Animation; FMAN 202; written
permission of the School of Cinema. An
introduction to computer-assisted animation.
NOTE: Students are required to bear the cost of
film stock, processing, printing, and other
materials.

NOTE: Students who have received credit for FMAN 302 or 313 may not take this course for credit.

*66 or fewer credits remaining in degree programme.

FMAN 315 From Idea to Storyboard (3 credits)

Prerequisite: FMAN 303 or 304 previously or concurrently and written permission of the School of Cinema. Exploration of the visual development of ideas and scripts in a storyboard form. Students participate in creative and experimental exercises which include timing, planning the sound track, and filming the storyboards.

FMAN 319 Character Animation (3 credits)
Prerequisite: FMAN 202 previously or
concurrently and written permission of the
School of Cinema. An examination of the
fundamentals of character animation, its theory,
techniques, and application to studio situations.
Exercises in character design and dramatization
are directed towards the students' particular
interests and style. NOTE A/See §200.3
NOTE: Previous drawing experience is

FMAN 324 Drawing for Animation (6 credits)

recommended.

Prerequisite: FMAN 202; enrolment in the Major in Film Animation; written permission of the School of Cinema. An intensive studio course exploring the design and construction of "characters" for animation. The concept of "drawing" is extended into various media including computers.

FMAN 326 Computer Animation (3 credits)

Prerequisite: FMAN 303 previously or concurrently and written permission of the School of Cinema. A studio course in aspects of 3D computer-generated animation and graphics, covering the fundamentals of image generation and motion analysis. NOTE A/See §200.3 NOTE: Students who have received credit for this course as a special topics offering may not take this course for credit.

FMAN 352 3-Dimensional Animation (3 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; FMAN 202; written permission of the School of Cinema. An intensive hands-on seminar/workshop in the art and craft of 3-D animation production. This course is designed to acquaint the student with photographic techniques, model and set construction, materials, motion control, and lighting, as it applies to animation filmmaking. Recent developments and a study of international styles and techniques are included. NOTE: Students who have received credit for FMAN 498H may not take this course for credit.

FMAN 398 Special Topics in Film Animation (3 credits)

Prerequisite: Written permission of the School of Cinema. An opportunity for study of limited and more specialized aspects of film animation.

NOTE C/See §200.3

NOTE: Students are required to bear the cost of materials.

FMAN 402 Animation III (9 credits)

Prerequisite: Third-year standing* in the Major in Film Animation; FMAN 212; FMAN 303 or 304; FMAN 324; FMST 323. A continuation on a more advanced level of Animation II, where students work independently on a major film animation project. NOTE A/See §200.3 NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials

*33 or fewer credits remaining in degree programme.

FMAN 446 Professional Internship I (3 credits)

Prerequisite: Second-year standing* in the Major in Film Animation; written permission of the School of Cinema. A Film Animation student who will be employed within the film industry during the same calendar year may seek permission to apply three credits towards the Film Animation degree programme. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. NOTE A/See §200.3. *66 or fewer credits remaining in degree programme.

FMAN 447 Professional Internship II (3 credits)

Prerequisite: Second-year standing* in the Major in Film Animation; written permission of the School of Cinema. A student repeating FMAN 446 registers for credit under FMAN 447. NOTE A/See §200.3.

*66 or fewer credits remaining in degree programme.

FMAN 448 *Independent Study I* (3 credits)
Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student explores a specific area of film animation. *NOTE A,C/See §200.3*

FMAN 449 *Independent Study II* (3 credits) Prerequisite: Written permission of the School of Cinema. A student repeating FMAN 448 registers for credit under FMAN 449 provided the subject matter is different. *NOTE A/See §200.3*

FMAN 498 Special Topics in Film Animation (3 credits)

Prerequisite: Written permission of the School of Cinema. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film animation. NOTE A,C/See §200.3

Film Production:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.60.2.

FMPR 231 Filmmaking I (6 credits)
Prerequisite: Enrolment in a Cinema programme;
FMST 211 or 212 previously or concurrently;
FMPR 242 concurrently; written permission of
the School of Cinema. An introductory course in
the theory and practice of filmmaking. This
course stresses the individual student's creative
efforts in producing films in 16mm format.
Lecture and laboratory. NOTE A/See §200.3
NOTE: Students are required to bear the cost of
film stock, processing, printing, and other
materials.

FMPR 242 Technical Aspects of Filmmaking I (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231 previously or concurrently; written permission of the School of Cinema. Initiation to problems of professional and creative use of sound (sync and non-sync) equipment and technology in film. Mainstream as well as non-conventional practices of filmmaking are emphasized.

NOTE: Students who have received credit for FMPR 337, 338, 344, 345, 498E, 498G may not take this course for credit.

FMPR 332 Filmmaking II (6 credits)

Prerequisite: Second-year standing* in the Major in Film Production; FMPR 231; FMPR 342 concurrently; written permission of the School of Cinema. An intermediate course in the theory and practice of filmmaking introducing lip-sync 16mm production and continuing more advanced 16mm production without lip-sync equipment (e.g. wild sound). Topics emphasized include the creative possibilities of the 16mm format, the development of ideas for films, and the preparation of these ideas for production, budgeting, production planning, and working

with a film crew. Students participate in a number of productions and assume a range of roles while beginning to develop their area of specialization within the production team. Others work individually or as small crews, depending upon the project and the format.

NOTE A/See §200.3

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Students who have received credit for FMPR 331 may not take this course for credit. *66 or fewer credits remaining in degree programme.

FMPR 334 Problems and Methods of Film Production and Distribution

(3 credits)

Prerequisite: FMPR 231. Topics include organizing a film project, financial aspects of film production and distribution, legal problems, film laboratory procedures, and post-production operations. NOTE A/See §200.3

FMPR 335 Acting and Directing Acting for the Screen I (3 credits)

Prerequisite: Written permission of the School of Cinema; FMPR 332 previously or concurrently, or six credits in Theatre Performance. This studio course for Cinema and Theatre students explores directing and performing for film; exercises are recorded on video for analysis. Both performers and directors examine acting and directing acting for the camera through such topics as role preparation, character development, and performance continuity. NOTE A/See §200.3

FMPR 339 Montage in Filmmaking (3 credits)

Prerequisite: Written permission of the School of Cinema; FMPR 332 previously or concurrently. Fiction and non-fiction film editing, emphasizing dynamic and continuity cutting and cutting-room techniques. Activities include editing the image in synchronized double-system, cutting music and sound effects, preparation for and supervision of the re-recording. NOTE A/See §200.3

FMPR 341 *Writing for Film I* (3 credits)
Prerequisite: FMPR 231 and written permission of the School of Cinema. An introduction to writing for film, with special emphasis on the relation of the script to filmmaking. Students are expected to submit work of their own for discussion, analysis, and possible production in filmmaking courses. *NOTE A/See §200.3*

FMPR 342 Technical Aspects of Filmmaking II (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMPR 332 previously or concurrently; written permission of the School of Cinema. A course offered at the intermediate level in which the complex technology of image in film is presented as a factor for the creative use of the

medium. Included are approaches employing video, optical printer, and animation stand. NOTE: Students who have received credit for FMPR 337, 338, 344, 345, 498E, 498G may not take this course for credit.

FMPR 343 Production Design (3 credits) Prerequisite: Second-year standing* in Film Production, Film Animation, or Theatre Department programmes and written permission of the School of Cinema. A practical examination of the visual aspects of film production. Topics in production design considered may include texture and visual styles, the collaborative process, project management, and the nature of constraints which apply to student and independent productions.

*66 or fewer credits remaining in degree programme

NOTE A/See §200.3

FMPR 350 Ways of Seeing in Film Production (3 credits)

Prerequisite: Enrolment in the Major in Film Production or the Specialization in Film Production; written permission of the School of Cinema. A forum of ideas which increases cinema's potential as a visual medium. Aspects of our visual culture are presented and discussed; work by painters, photographers, sculptors, and architects constitutes the main source material for the course. Students work on individual visual projects. NOTE A/See 200.3 NOTE: Students who have received credit for FMPR 498F may not take this course for credit.

FMPR 398 Special Topics in Film Production (3 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of specialized aspects of film production outside the scope of existing courses. NOTE C/See §200.3

FMPR 399 Special Topics in Film Production (6 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of specialized aspects of film production outside the scope of existing courses. NOTE C/See §200.3

FMPR 432 Filmmaking III (6 credits) Prerequisite: Third-year standing* in the Specialization in Film Production or the Major in Film Production; FMPR 242, 332, 342; written permission of the School of Cinema. A progression of FMPR 332, with students working on more advanced filmmaking projects. The development of concepts introduced in FMPR 332 is continued. NOTE A/See §200.3 NOTE: Students are required to bear the cost of film stock, processing, printing, and other

materials.

NOTE: Students who have received credit for FMPR 431 may not take this course for credit.

*33 or fewer credits remaining in degree programme.

FMPR 435 Acting and Directing Acting for the Screen II (3 credits)

Prerequisite: FMPR 335 and written permission of the School of Cinema. A continuation of FMPR 335 on a more advanced level.

FMPR 438 Cinematography (3 credits)
Prerequisite: Enrolment in the Specialization in
Film Production or the Major in Film Production;
FMPR 242, 342; written permission of the
School of Cinema. An advanced course in
camera and light for cinema. The contribution of
cinematography to filmmaking is investigated
through studio and location shooting exercises,
lighting exercises, and lectures. Subjects such
as film stocks, lenses, filters, and camera
movement are discussed as elements in the
creative process of filmmaking.
NOTE A/See §200.3

FMPR 439 Advanced Montage in Filmmaking (3 credits)

Prerequisite: FMPR 339 and written permission of the School of Cinema. A continuation of FMPR 339.

FMPR 440 Sound for Film (3 credits)
Prerequisite: Enrolment in the Specialization in
Film Production or the Major in Film Production;
FMPR 242, 342; written permission of the
School of Cinema. A course which concentrates
on the interaction between sound and image in
film. While it deals with advanced technical
aspects of location recording and studio work,
its central focus is the creative designing of the
soundtrack. Emphasis is placed on individual
and collective sound projects.

FMPR 441 *Writing for Film II* (3 credits) Prerequisite: FMPR 341 and written permission of the School of Cinema. A continuation of FMPR 341 on a more advanced level.

FMPR 442 Optical Printer Practice (3 credits)

Prerequisite: FMPR 242 and 342 previously or concurrently, or FMAN 314; written permission of the School of Cinema. A film production course assisting students in the understanding and application of advanced optical printer technology and aesthetics. *NOTE A/See §200.3*

FMPR 445 Professional Internship (6 credits)

Prerequisite: Second-year standing* in the Specialization in Film Production or the Major in Cinema, Option A, Film Production; and written permission of the School of Cinema. A Film Production student who will be employed within the film industry during the same calendar year may seek permission to apply six credits towards the Film Production degree programme. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of

Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. NOTE A/See 200.3
*66 or fewer credits remaining in degree programme.

FMPR 446 Professional Internship I (3 credits)

Prerequisite: Enrolment in the Major in Cinema, Option A, Film Production or in the Specialization in Film Production; and written permission of the School of Cinema. A Film Production student who will be employed within the film industry during the same calendar year may seek permission to apply three credits towards the Film Production degree programme. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. NOTE A/See §200.3

FMPR 447 Professional Internship II (3 credits)

Prerequisite: Written permission of the School of Cinema. A student repeating FMPR 446 for credit registers under FMPR 447.

NOTE A/See §200.3

FMPR 448 *Independent Study I* (3 credits) Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student explores a specific area of film production.

NOTE A,C/See §200.3

FMPR 449 Independent Study II (3 credits)
Prerequisite: Written permission of the School of
Cinema. A student repeating FMPR 448
registers for credit under FMPR 449 provided
the subject matter is different.
NOTE A/See §200.3

FMPR 450 Film Production Specialization Seminar (3 credits)

Prerequisite: Enrolment in the Specialization in Film Production and written permission of the School of Cinema. A seminar offering in-depth, practical approaches to artistic and technical situations. This course brings together all students in the Specialization in Film Production.

FMPR 451 Advanced Project Internship I (3 credits)

Prerequisite: Enrolment in the Specialization in Film Production or the Major in Film Production; FMPR 332 previously or concurrently; written permission of the School of Cinema. A Film Production student who contributes in a key position to a graduate project in the Film Production MFA programme may apply for credits on the understanding that the application

take place prior to the production and is authorized by the faculty members responsible for both programmes.

FMPR 452 Advanced Project Internship II (3 credits)

Prerequisite: FMPR 451 and written permission of the School of Cinema. A student repeating FMPR 451 for credit registers under FMPR 452.

FMPR 458 *Independent Study* (6 credits)
Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student explores a specific area of Film Production.

FMPR 498 Special Topics in Film Production (3 credits)

Prerequisite: Written permission of the School of Cinema. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film production. NOTE A,C/See §200.3

FMPR 499 Special Topics in Film Production (6 credits)

Prerequisite: Written permission of the School of Cinema. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film production. NOTE A, C/See §200.3

81.60.2 Filmmaking Courses in which films are produced as a course requirement are:

FMAN 202⁶, 303⁹, 304⁹, 402⁹ FMPR 231⁶, 332⁶, 432⁶

NOTE: For course descriptions see §31.070.

81.60.3 Communication Studies Film Courses

Students enrolled in the Film Studies or Film Production Major or Specialization programmes may select up to 12 credits from the Communication Studies courses listed below. Students enrolled in the Minor in Cinema and the Minor in Film Studies may select up to six credits from the Communication Studies courses listed below.

The credits earned may be applied as Film Studies and/or Cinema electives for degree purposes.

COMS 301 Selected Topics in National Cinemas (3 credits)
COMS 302 Selected Topics in Film Genres (3 credits)
COMS 303 Selected Topics in Canadian Cinemas (3 credits)
COMS 304 Selected Topics in Film Studies (3 credits)
COMS 306 Documentary Film (3 credits)
COMS 416 Film Criticism (3 credits)

COMS 416 Film Criticism (3 credits)
COMS 417 Film Ideas (3 credits)

COMS 434 Advanced Topics in Film Studies (3 credits)

81.70

CONTEMPORARY DANCE

Assistant Professor Faculty SILVY PANET-RAYMOND, Associate Professor MICHAEL MONTANARO Lovola Campus Location TJ Building, Room: TJ 307 (514) 848-4740 The Contemporary Dance Department offers comprehensive training which combines formal dance Department training with extensive studies in choreography. Encouraging students to discover and develop their **Objectives** individual creative capacities as both dancers and choreographers is the mission of the Dance programme. Performance is a crucial element in this development, and students at Concordia gain valuable experience performing or staging their own choreographies. Students are responsible for satisfying their particular degree requirements; hence, the following Programme sequence must be read in conjunction with §81.20. The superscript indicates credit value.

60 BFA Major in Contemporary Dance

- 18 Dance 200⁶, 300⁶, 400⁶
- 12 Chosen from Dance 210⁶, 310⁶, 330⁶, 410⁶
- 12 Dance 320⁶, 420⁶
- 3 Dance 2113
- 6 Dance 230⁶
- 3 Theatre Performance 201³
- 6 SFAR or other Studio Art elective or Department of Theatre elective, selected in consultation with an adviser.

81.70.1 Admission to Contemporary Dance There is a distinct procedure for admission to the Major in Contemporary Dance in addition to the normal admission process of Concordia University. All applicants to Contemporary Dance are required to attend an *audition* as part of the admission process.

Applicants should preferably contact the Department of Contemporary Dance before Wednesday, March 1, 2000 to arrange their audition and for detailed information regarding admission to Dance. For late auditions in August, contact the Department preferably by June 28.

Courses

Prerequisite: DANC 210, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. Studies of the creative process in dance, emphasizing movement exploration in relation to form and content. Various approaches to dance are introduced and personal and group research is developed. Consideration is given to visual, verbal, and acoustic elements in dance. Studio: four hours per week. Laboratory: two hours per week. NOTE A/See §200.3

DANC 210 Body Movement I (6 credits) Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. The technical development of suppleness, strength, coordination, and kinetic awareness is

emphasized. Body movement is discussed and developed as preparation for dance. Studio: six hours per week.

DANC 211 Dance Traditions (3 credits) A survey of the history of dance, including relations between older dance traditions and styles of modern dance. Lecture course.

DANC 230 Sound and Silence for the Dancer (6 credits)

Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. The basics of music theory through guided analytical text using singing, single line score reading and moving, including the study of rhythm, melody, harmony, tempi, dynamics, tone colour, and musical forms with emphasis on the fundamental understanding of rhythm, melody, and harmony physically and mentally.

DANC 240* Principles of Contemporary Dance (6 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A survey of technical skills, improvisation, and dance composition. Studio: four hours per week. Laboratory: two hours per week. *Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their degree programme.

DANC 261 Summer Workshop in Dance I (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Sequences of studio sessions which may include body movement, improvisation, performance technique, and choreography. Studio: four hours per week. Laboratory: two hours per week. NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their programme requirements.

DANC 262 Summer Workshop in Dance II (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A continuation of DANC 261. Studio: four hours per week. Laboratory: two hours per week. NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their programme requirements.

DANC 300 Workshop in Dance II (6 credits)

Prerequisite: DANC 200, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A continuation of DANC 200. Studio: four hours per week. Laboratory: two hours per week.

DANC 310 Body Movement II (6 credits) Prerequisite: DANC 210 or DANC 330, and enrolment in the Major in Contemporary Dance. or written permission of the Department of Contemporary Dance. A continuation of DANC 210. Studio: six hours per week.

DANC 320 Choreography I (6 credits) Prerequisite: DANC 300, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. The organization of movement, space, and time into dance performances. The process of choreographic creation is followed through stages of originating the idea, developing the theme and structure, rehearsing, and performing. Students' works are performed. Studio: four hours per week. Practice laboratory: two hours per week. Rehearsal: four hours per week.

Principles of Anatomy and **DANC 330 Body Movement** (6 credits)

Prerequisite: DANC 210, and written permission

of the Department of Contemporary Dance. A workshop of movement fundamentals based on the practical understanding of anatomy and dance technique. Studio: six hours per week.

DANC 398 Special Topics in Dance (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Topics vary from year to year, taking into account the special aptitudes of instructors and students. Studio: six hours. NOTE C/See §200.3

Workshop in Dance III **DANC 400** (6 credits)

Prerequisite: DANC 300, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A workshop that provides opportunities for the extension of creative potential, improvement of performance abilities, and development of methodologies in research. using movement and other related art forms. Studio: four hours per week. Laboratory: two hours per week.

Body Movement III (6 credits) **DANC 410** Prerequisite: DANC 310 or 330 previously and DANC 400, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A continuation of DANC 310. Studio: six hours per week.

DANC 420 Choreography II (6 credits) Prerequisite: DANC 320, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A continuation of DANC 320. Studio: four hours per week. Practice laboratory: two hours per week. Rehearsal: four hours per week.

DANC 441 Independent Study I (3 credits) Prerequisite: Written permission of the Department of Contemporary Dance. A course of independent study in which the student explores a specific area of contemporary dance. NOTE A/See §200.3

Independent Study II (3 credits) DANC 442 Prerequisite: Written permission of the Department of Contemporary Dance. A student repeating DANC 441 registers for credit under DANC 442. NOTE A/See §200.3

DANC 499 Topics in Dance (6 credits) Prerequisite: Written permission of the Department of Contemporary Dance. Advanced choreography where movement shares equal emphasis with all other arts developed into multi-media theatre. Studio: four hours per week. Practice laboratory: two hours per week. Rehearsal: four hours per week.

81.80

DESIGN ART

Faculty

Chair LYDIA SHARMAN, Associate Professor

Associate Professors GREGORY P. GARVEY KAT O'BRIEN Assistant Professors
P. KAREN LANGSHAW
MICHAEL LONGFORD

Location

Sir George Williams Campus Visual Arts Building, Room: VA 244 (514) 848-4626

Department Objectives

The Department of Design Art offers a three-year undergraduate programme providing a broad foundation for a multi-faceted discipline. The programme emphasizes the interdependence of design, fine arts, humanities, and sciences. Personal creative expression and aesthetic sensibility are balanced with an understanding of the cultural impact, social applications, and ethical responsibilities of the design artist.

Students study design history, theory, and practice, and are introduced to contemporary issues and innovative developments. In both the theoretical and practical components of the programme, the curriculum emphasizes creative experimentation, imaginative risk-taking, and collaborative practices. Students undertake experimental and applied projects in both two- and three-dimensional design, site-specific installations, and digital media. The learning of computer skills and the acquisition of the language of digital technologies are an essential aspect of all courses in the Design Art programme. Students are encouraged to develop their intellectual curiosity and a keen sense of critical analysis through research and rational inquiry, and to utilize their powers of both written and verbal expression.

Programme

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

- 72 BFA Major in Design Art
- 30 DART 200⁶, 210⁶, 300⁶, 310⁶, 400⁶
- 6-12 DART 4226, 4236
- 0-6 DART 410⁶, 424⁶, 425⁶, 440⁶, 470⁶, 471³, 499⁶
- 6 DRAW 200⁶
- 6 Studio Art* elective chosen in consultation with an adviser
- 6 Chosen from SFAR 250⁶, 260⁶, 270⁶ or a Studio Art elective outside the Department of Design Art
- 6 DART 260⁶
- 6 Art History electives or Art 261⁶

*Chosen from the Departments of Design Art or Studio Arts.

81.80.1 Admission to the Major in Design Art In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Design Art.

All applicants must submit a portfolio as part of the admission process.

- 1. Portfolios should consist of a maximum of 20 examples of the applicant's own work.
- 2. Portfolios should consist of two-dimensional, three-dimensional, time-based fine art studio and applied design work in a wide range of media.
- 3. The portfolio should demonstrate the applicant's creative potential as a designer/artist. Included work should represent an ability in two- and three-dimensional projects in fine arts, applied design, and computer-assisted design. For example: painting, sculpture, graphic and product design, theatre design, studio and technical drawing, photography, video and digital media.
- Individual works must be labelled including applicant's name, date, size of work, and medium(s)
 used.
- 5. Each portfolio must contain a list of contents including all the above information.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- Portfolios should be presented in a sturdy folder; works should be flat, unframed, and well-presented.

- 8. Out-of-town applicants may submit photographs, slides, videos and/or CD's of their work. *In addition:*
- 9. A letter of intent written in either English or French must be submitted to the Department office by the applicants when arranging an interview appointment. The letter must state the reason for applying to the Design Art programme and the ways in which the applicant's education background, work experience, and general interests can act as a preparation for the Design Art programme.
- 10. Applicants are required to attend an *interview* during which they will be required to answer questions pertinent to Design Art and other disciplines. Applicants must contact the Department of Design Art early in March (before the deadline date of March 15) for an appointment time. Late applicants will be considered when appropriate. Please contact the Department at (514) 848-4626 for additional information.
- Applicants are required to submit a copy of their transcript to the Department office when arranging an interview appointment.
- 12. Portfolios must be brought by the applicants to their interview.

Courses

NOTE: Students are required to bear the cost of materials in Studio Art courses.

DART 200 Design Art Theory and Practice (6 credits)

Prerequisite: Enrolment in the Major in Design Art or written permission of the Department of Design Art. In this course, students are introduced to design art concepts and methods. Content focuses on design fundamentals and innovation in two- and three-dimensional design, and digital media. This course emphasizes the integration of digital technologies in design art practice.

DART 202 Design in the Arts I (3 credits)
Prerequisite: Written permission of the
Department of Design Art. This course is not
open to Design Art students unless they require
108 or 120 credits. A foundation course in the
elements and principles of design for all Fine
Arts students with concentrations outside of
Design Art. The focus is on process rather than
product creation in this theoretical and practical
preparation for design problems in the student's
area of concentration.

DART 203 Design in the Arts II (3 credits)
Prerequisite: DART 202; written permission of
the Department of Design Art. This course is not
open to Design Art students unless they require
108 or 120 credits. This course develops the
study of elements and principles of design art
begun in DART 202 for Fine Arts students with
concentrations outside Design Art.

DART 210 Introduction to Research Methodology in Design Art (6 credits)

Prerequisite: Enrolment in the Major in Design Art or written permission of the Department of Design Art. A project-based study providing basic experiences in research methodology. The content of this course focuses on the relationship of the individual to the social, economic and cultural implications of design, and introduces the interdependence of design, fine arts, humanities and sciences. *NOTE A/See §200.3*

DART 260 The History of Design: Theory and Practice (6 credits)

Prerequisite: Enrolment in the Major in Design

Art or written permission of the Department of Design Art. A consideration of design theory and practice, with emphasis on the interrelationship of stylistic, socio-cultural, and technical aspects. Examples are drawn from a broad spectrum of epochs and geographical areas, but particular attention is given to historical approaches that have importance for contemporary design. Students will complete their major research project using digital imaging and page layout software.

DART 300 Individual Projects in Design Art (Analysis and Application) (6 credits)

Prerequisite: DART 200 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. Individual projects involving experimentation, innovation, and problem-solving in design art are completed and analysed in terms of their application to the assigned objectives. Students build on the digital design skills, which include advanced 3D modelling and rendering software.

DART 310 Collaborative Projects in Design Art (Research Coordination) (6 credits)

Prerequisite: DART 200, 210; DART 300, previously or concurrently, and either enrolment in the Major in Design Art or written permission of the Department of Design Art. Problem-solving in design art. Collaborative projects involving experimentation and innovation are completed and analysed in terms of their application to the assigned objectives. Team research and coordination are major requirements of this course. *NOTE A/See §200.3*

DART 398 Special Topics in Design Art (3 credits)

Prerequisite: Second-year standing* in the Major in Design Art or written permission of the Department of Design Art. This course provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. *66 or fewer credits remaining in degree programme.

DART 399 Special Topics in Design Art (6 credits)

Prerequisite: Second-year standing* in the Major in Design Art or written permission of the Department of Design Art. This course provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. *66 or fewer credits remaining in degree programme.

Prerequisite: DART 300, 310, and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A theory course involving discussion and lectures, in addition to workshops and field trips outside of course time. Standards and theories of design, both past and present, are discussed. Student seminar presentations are required. NOTE A/See §200.3

DART 410 Design for Interactive New Media (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. This project-based course explores the ways in which information is organized, manipulated, and disseminated in the context of new information technologies. Topics for investigation include new opportunities in new media authoring and Web site design; animation, sound, and digital video; and interactive interface design.

DART 422 Experimental Design: Image (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio in which innovative concepts, techniques, and tools of image-making are investigated and developed. Students develop a body of work that combines traditional and digital media in the expression of their image-making. Students learn to align the language of their media in the content, direction, and dissemination of their work through all stages of the design process, from ideation through to production.

DART 423 Experimental Design: Object (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio in which innovative concepts, techniques, and tools of object-making are investigated and developed. NOTE A/See §200.3

DART 424 Applied Design: Image (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio course in which individual student projects, based upon social and environmental issues, address the use of image in the marketplace. A range of practices employed in contemporary image-making is investigated. The course focuses on graphic design and typography in digital publishing systems for print media. Topics for investigation include the role and responsibility of the designer, image ethics, photography, advertising, media jamming and alternative media. Students are asked to consider notions of community, audience, and the role of the designer in the social and political dimension of our everyday lives.

DART 425 Applied Design: Object (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio course in which individual student projects, based upon social and environmental issues, address the use of object in the marketplace. Students are taught advanced 3D modelling and rendering software.

DART 440 Independent Study (6 credits)
Prerequisite: Written permission of the
Department of Design Art. Independent study in
which the student explores a special area of
design art. NOTE A/See §200.3

DART 470 Professional Internship (6 credits)

Prerequisite: Third-year standing* in the Major in Design Art and written permission of the Department of Design Art. This option is for students wishing to undertake research and obtain practical experience for academic credit as an intern with an established artist/designer, studio, publication, publishing house, museum, corporation, or non-profit organization. Other related options for internship will also be considered. The internship is carried out under the joint supervision of a qualified professional from within the University or the organization involved and a full-time faculty member. A clearly defined agreement between the Department, the student and the artist/designer or institution involved is made before the internship is undertaken. This agreement states clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate an appropriate academic experience for the student.

*33 or fewer credits remaining in degree programme.

DART 471 Professional Internship (3 credits)

Prerequisite: Third-year standing* in the Major in Design Art and written permission of the Department of Design Art. Three-credit internship, as described in DART 470, for one semester only.

*33 or fewer credits remaining in degree programme.

DART 498 Special Topics in Design Art (3 credits)

Prerequisite: Second-year standing* in the Major in Design Art or written permission of the Department of Design Art. A course for advanced students which provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. *66 or fewer credits remaining in degree programme.

DART 499 Special Topics in Design Art (6 credits)

Prerequisite: Second-year standing* in the Major in Design Art or written permission of the Department of Design Art. A course for advanced students which provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. *66 or fewer credits remaining in degree programme.

81.90 DIGITAL IMAGE/SOUND AND THE FINE ARTS

Faculty Coordinator T.B.A.

Location

Sir George Williams Campus Visual Arts Building, Room: VA 250 (514) 848-4600 http://digital.concordia.ca

Programme Objective

The Faculty of Fine Arts offers a Major and a Minor in Digital Image/Sound and the Fine Arts. The Major programme complements a new Computer Science Option in Computer Applications. These two programmes allow computer scientists to study particular fine arts disciplines, and artists to cross over into the more scientific realm of computer science. The Major and the Minor programmes in Digital Image/Sound and the Fine Arts provide students with a knowledge and understanding of digital media concepts, and authoring and scripting for the design of interactive multi-media.

Programmes

- 45 Major in Digital Image/Sound and the Fine Arts
- 6 FFAR 250°
- 6 DFAR 350⁶
- 6 DFAR 450⁶
- 12-15 Chosen from DART 200⁶; EAMT 205⁶; FMAN 304⁹; IDYS 200⁶; PHOT 200⁶; or one of the SFAR courses
- 12-15 Chosen from Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses
 - 30 Minor in Digital Image/Sound and the Fine Arts
 - 6 FFAR 250⁶
 - 5 DFAR 350⁶
- 6-12 Chosen from DART 2006; EAMT 2056; FMAN 3049; IDYS 2006; PHOT 2006; or one of the SFAR courses
- 6-12 Chosen from DFAR 450⁶; Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses

81.90.1 Admission Requirements

This programme is limited to students who are enrolled in or simultaneously applying for the Computer Science Option in Computer Applications. In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Digital Image/Sound and the Fine Arts. All applicants must submit to the Programme Office, Visual Arts Building, Room 237, between March 8 – 21, 2000:

- 1. a letter of intent,
- 2. a copy of their most recent transcript;
- 3. a portfolio consisting of written, two-dimensional, three-dimensional and time-based work;
- include excerpts of typed writing samples, two-dimensional work; 10–20 slides; and/or video, maximum 10 minutes (VHS, HI-8mm or 8mm only); and/or a sound tape (analog or DAT), maximum 10 minutes; and/or CD-ROM, KODAK Photo-CD, data cartridge (Syquest, ZIP) or diskette (must be Macintosh compatible); and/or URL reference to a Web site;
- 5. two-dimensional works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form:
- 6. individual works must be labelled including applicant's name, date, size of work, and medium(s) used. Applicants should indicate clearly what is to be reviewed. In the case of computer files, applicants must list precisely the directory/folder or pathname which contains the file(s); the complete file name(s) with extension (if relevant) and the file type;
- 7. still computer graphic images should be presented as slides or hard copy prints. In general, time-based media should be presented on video and/or audio tape. The admissions committee can review Web pages and HTML files compatible with Netscape Navigator. Otherwise, digital video, digital audio, computer graphics animation computer files must be presented as self-running desktop presentations (Macintosh compatible) and should not require a separate application for viewing. Examples are Macromedia Director Projector files or Quicktime Movies.

- Students should contact the Programme Office to confirm acceptability of viewing format and data storage media;
- the portfolio should demonstrate creative and technical potential as a multi-media designer/artist. Letter of intent and portfolio should indicate experience/skills/knowledge and interest in some of the following areas: writing, critical theory and philosophy; art direction; illustration, painting, photography, graphic design, and typography; audio editing, recording, DJ mixing, music composition, radio production; two-dimensional and three-dimensional computer graphics and animation; design and direction for theatre, film, and video production; software programming, cognitive psychology and human factors engineering for the human computer interface; and
- applicants must fulfil the admission requirements for the Computer Science Option in Computer Applications (see §71.10.2) and be accepted into the Computer Applications Option.

Courses

DFAR 350 Multi-Media Authoring in the Fine Arts (6 credits)

Prerequisite: Second-year standing* in the Major or Minor in Digital Image/Sound and the Fine Arts, or written permission of the coordinator of the programme. This course is an in-depth introduction to digital media concepts, authoring and scripting for the design of interactive multi-media. Course topics include: 1) digital media representation, characteristics, and limitations for graphics, audio, animation and video; 2) perceptual and aesthetic aspects of digital media; 3) compression schemes and standards; 4) tools and techniques of image and audio processing; and 5) authoring, scripting, and programming environments and applications. Students complete individual and group projects requiring computer laboratory use. These projects may involve CD-ROM production and working with the World Wide Web. Software applications may include Macromedia Director and Lingo, MAX, Pro Tools, Adobe Premiere, HTML and JAVA.

*66 or fewer credits remaining in degree programme.

DFAR 450 Advanced Workshop: Theory and Practice in Digital Image/Sound (6 credits)

Prerequisite: Third-year standing* in the Major in Digital Image/Sound and the Fine Arts; DFAR 350; or written permission of the coordinator. This course is a practice-oriented studio/seminar. Students pursue self-defined studio projects based on their interest and experience, and centred on the use of the computers in Fine Arts disciplines. Complementing the individual's production would be a series of lectures and readings/discussions exploring the current theoretical and critical literature of the field. The material would of necessity be cross-disciplinary in nature. *33 or fewer credits remaining in degree programme.

81.100

MUSIC

Faculty

MARK CORWIN, Associate Professor

Associate Professors LISELYN ADAMS **KEVIN AUSTIN** JERI BROWN ALLAN CROSSMAN

ROD ELLIAS CHARLES ELLISON ANDREW HOMZY CHRISTOPHER JACKSON

Assistant Professor ROSEMARY MOUNTAIN

Location

Loyola Campus Refectory Building, Room: RF 326 (514) 848-4705

Department Objectives

The Mission of the Department of Music is to develop musicians, to support musical activities through teaching, research and performances, and to foster the appreciation of the value of music and fine arts in society.

The Department is committed to the development of musicians through options and opportunities found within the multi-disciplinary context of the Faculty of Fine Arts through generalized and specialized education.

Areas of study include theory, history, instrumental and vocal studies, including ensembles and private study, composition, jazz, electroacoustics/recording, and music technology.

Academic scholarship, research, and creativity enhance faculty members' teaching which furthers the Department's involvement in national and international artistic and scholarly communities.

Programmes

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20. The superscript indicates credit value.

SPECIALIZATION IN MUSIC

The Faculty of Fine Arts offers four Specialization programmes in Music, each of 66 credits. Students applying for entrance to the Department are accepted into the Major in Integrative Music Studies. Upon completion of 30 credits, students may apply for transfer into a Specialization. Acceptance into a Specialization is based on the student's general academic performance in all University courses, but especially in the Music courses.

BFA Specialization in Jazz Studies 66

- JAZZ 2006 or, if exempt, Department of Music electives, excluding MUSI 200 and INMS 209 and 250
- JPER 220⁶; INMS 310⁶, 350⁶*; MPER 2313
- MUSI 2306 or MUSI 2313 and 2323
- MHIS 200⁶ or, if exempt, MHIS electives
- MHIS electives
- Chosen from JAZZ 301³, 302³, 305⁶, 401³, 402³, 405⁶; JPER 321³, 330⁶, 341³, 421³, 422³, 430⁶, 441³
- Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with a Music adviser.

*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.

BFA Specialization in Music Performance Studies

- INMS 209³, 250⁶, 310⁶, 350⁶*; MPER 231³, 490⁶
- MUSI 230⁶ or MUSI 231³ and 232³

- MUSI 3306 or MPER 3906
- MHIS 2006 or, if exempt, MHIS electives
- MHIS electives
- Chosen from MPER 201³, 301³, 321³, 322³, 331³, 398³, 399⁶, 401³, 421³, 422³, 431³, 498³, 499⁶

*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.

66 BFA Specialization in Music Theory/ Composition

- INMS 310⁶, 350⁶, 450⁶; MPER 231³ MUSI 230⁶ or MUSI 231³ and 232³ 21
- MHIS 2006 or, if exempt, MHIS electives 6
- MHIS electives 6
- 6-12 INMS 320⁶, 360⁶, 398³, 399⁶; JAZZ 305⁶; EAMT 205⁶
 - Chosen from INMS 460⁶, 498³, 499⁶; EAMT 305⁶; JAZZ 301³, 302³, 405⁶
- Department of Music electives, exclud-9-15 ing MUSI 200, INMS 209 and 250, chosen in consultation with an adviser.

66 BFA Specialization in Selected Music Studies

- 15 INMS 310⁶, 350⁶*; MPER 231³
- 3-6 Chosen from MUSI 230⁶, 231³, 232³
- 6 MHIS 200⁶ or, if exempt, MHIS electives
- 6 MHIS electives
- 3-6 MUSI 491³, 492³
- 27-30 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with a Music adviser

*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.

Eligibility:

Completion of 30 credits, with a "B" average or better.

Entrance:

Submission and approval of plan of course work and Special Project (MUSI 491).

Review:

Upon completion of the courses in this Specialization, the Special Project is evaluated

by the appropriate Review Committee. The type of evaluation used depends upon the nature of the project: exhibition, concert, recording, essay, musical production, etc.

54 BFA Major in Integrative Music Studies

- 24 INMS 209³, 250⁶, 310⁶, 350⁶*; MPER 231³
- 3-6 Chosen from MUSI 230⁶, 231³, 232³
- 6 MHIS 2006 or, if exempt, MHIS electives
- 6 MHIS electives
- 12-15 Department of Music electives, excluding MUSI 200

*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.

24 Minor in Music

- 9 INMS 209³ and 250⁶ or, if exempt, Music electives selected in consultation with a Music adviser
- Music electives chosen in consultation with a Music adviser

81.100.1 Admission to Programmes in Music The Department of Music has a distinct admission procedure in addition to the normal admission process of Concordia University. All applicants (to Music programmes) attend an interview/audition as part of the admission process. At the time of their interview they will be required to write a Theory Placement Test (for placement in theory courses).

Applicants are required to contact the Department of Music before March 1 to arrange their appointments and obtain other information regarding admission procedures. Applicants are admitted to the Major in Integrative Music Studies.

81.100.2 Admission to Courses in Music for Non-Music Students Specific procedures must be followed by all non-Music Majors wishing to register in the Department of Music.

- Not all courses are available to non-Music students. Please consult the Department of Music for policy and accessibility of courses.
- b) Students who wish to register for courses which have a theory prerequisite, given availability, must write the Theory Placement Test. This is done in the Department of Music at least two weeks prior to the registration appointment date.
- c) Students who wish to sing or play in an ensemble must contact the Department of Music for information concerning audition and registration for Music Performance courses.

Courses

For specific information regarding entrance to courses in the Department of Music please see above.

Music:

MUSI 200 Music Literacy and Keyboard Skills (6 credits)

An intensive introductory course in basic musical materials, with integrated practice in aural training and keyboard skills.

NOTE: Students in a Major, Minor, or Specialization programme in the Department of Music may not take this course for credit towards their degrees.

NOTE: Students who have received credit for this topic under INMS 499 may not take this course for credit.

MUSI 223 Understanding Music (3 credits)
A course in analytical listening for the student
who has little or no musical background. The
works studied represent the major styles and

idioms of Western music. NOTE A/See §200.3 NOTE: Students in a Major, Minor, or Specialization programme in the Department of Music may not take this course for credit towards their degrees.

NOTE: Students are limited to a maximum of 18 credits in Private Study.

MUSI 230 Private Study I (6 credits)

Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music coordinated with the student's programme. NOTE A/See §200.3

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course. MUSI 231 Private Study Ia (3 credits)
Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music coordinated with the student's programme. NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI 232 Private Study Ib (3 credits)
Prerequisite: MUSI 231 and written permission
of the Department of Music. A continuation of
MUSI 231.

MUSI 330 Private Study II (6 credits)
Prerequisite: MUSI 230 or 231 or 232; secondyear standing*; written permission of the Department of Music. A continuation of MUSI 230.
NOTE A/See §200.3

NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER 390. NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

*66 or fewer credits remaining in degree programme.

MUSI 331 Private Study IIa (3 credits)
Prerequisite: MUSI 230 or MUSI 231 and 232;
second-year standing*; written permission of the
Department of Music. A continuation of MUSI 232.
NOTE: Students are required to assume part of
the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

*66 or fewer credits remaining in degree programme.

MUSI 332 Private Study IIb (3 credits)
Prerequisite: MUSI 331 and written permission
of the Department of Music. A continuation of
MUSI 331.

MUSI 398 Special Topics in Music (3 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 399 Special Topics in Music (6 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 430 Private Study III (6 credits)
Prerequisite: MUSI 330 or 331 or 332; third-year standing*; written permission of the Department

of Music. A continuation of MUSI 330. NOTE A/See §200.3

NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER 490.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

*33 or fewer credits remaining in degree programme.

MUSI 431 Private Study Illa (3 credits)
Prerequisite: MUSI 330 or MUSI 331 and 332;
third-year standing*; written permission of the
Department of Music. A continuation of
MUSI 332.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

*33 or fewer credits remaining in degree programme.

MUSI 432 Private Study IIIb (3 credits)
Prerequisite: MUSI 431 and written permission
of the Department of Music. A continuation of
MUSI 431.

MUSI 491 Special Project in Music (3 credits)

Prerequisite: Enrolment in the Specialization in Selected Music Studies. This course affords an opportunity for extensive development of a project under the direction of a Faculty member. Students submit a project proposal in accordance with the regulations for admission to the Specialization.

NOTE: Students repeating MUSI 491 register for MUSI 492 for credit provided the subject matter is different.

NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

MUSI 492 Special Project in Music (3 credits)

Prerequisite: MUSI 491. A continuation of MUSI 491.

NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

MUSI 498 Special Topics in Music (3 credits)

Prerequisite: Written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 499 Special Topics in Music (6 credits)

Prerequisite: Written permission of the Depart-

ment of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

Electroacoustics and Music Technology:

EAMT 205 Electroacoustics I (6 credits)

A seminar/workshop in electroacoustics introducing composition through a series of directed studies involving tape editing, recording, musique concrète, processing of analog sounds, and analog synthesis. Other topics include history, acoustics and psychoacoustics, recent technological developments, digital signal processing, computer applications, and MIDI. Classroom and laboratory.

NOTE A/See §200.3

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for CMUS 310 may not take this course for credit.

EAMT 305 Electroacoustics II (6 credits)

Prerequisite: EAMT 205. A seminar/workshop in electroacoustics with continued work in composition, history, and sound technology. Technological developments, computer applications, MIDI, and contemporary techniques are explored in depth through a series of directed studies involving digital signal processing, multi-track studio techniques, digital synthesis and sampling. Classroom and laboratory. NOTE A/See §200.3 NOTE: Students are required to bear the cost of

NOTE: Students who have received credit for CMUS 410 may not take this course for credit.

EAMT 350 Sound Recording and Reinforcement I (6 credits)

Prerequisite: INMS 209 and 250. An intensive hands-on seminar/workshop studying the techniques used to record and edit music in settings ranging from live concert performances to studio session recordings. Hands-on experience and aural perception is developed during ensemble rehearsal and recording sessions. Emphasis is placed on production topics such as multi-track recording, microphone placement systems, audio processes. An understanding of the language of music through basic music appreciation skills as they relate to recording and editing of music is developed. NOTE A/See §200.3

NOTE: Students who have received credit for CMUS 350 may not take this course for credit.

EAMT 398 Special Topics in Electroacoustics and **Technology** (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in electroacoustics and technology.

EAMT 399 Special Topics in Electroacoustics and **Technology** (6 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in electroacoustics and technology.

EAMT 406 Electroacoustic Composition Seminar/Workshop I (3 credits)

Prerequisite: EAMT 305. A seminar/workshop for advanced students in electroacoustics. The focus is compositional. An interdisciplinary aspect to the final project is encouraged. Classroom and laboratory. NOTE C/See §200.3 NOTE: This is a full-year course.

NOTE: Students are required to bear the cost of

NOTE: Students who have received credit for CMUS 446 may not take this course for credit.

EAMT 407 Electroacoustic Composition Seminar/Workshop II (3 credits)

Prerequisite: EAMT 406. A continuation of **EAMT 406.**

NOTE: This is a full-year course.

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for CMUS 447 may not take this course for credit.

EAMT 451 Sound Recording and Reinforcement II (3 credits)

Prerequisite: EAMT 350, A continuation of EAMT 350. Emphasis is on advanced independent projects.

NOTE: This is a full-year course.

NOTE: Students who have received credit for CMUS 450 may not take this course for credit.

EAMT 452 Sound Recording and Reinforcement III (3 credits)

Prerequisite: EAMT 451. A continuation of

EAMT 451.

NOTE: This is a full-year course.

Independent Study I (3 credits) Prerequisite: Written permission of the Department of Music. A student-designed course of study, approved by an advisor, that focuses on an area of electroacoustics and/or music technology. *Students may count a maximum of nine credits in independent studies towards their degree programme.

EAMT 472* Independent Study II (3 credits) Prerequisite: EAMT 471 and written permission of the Department of Music. A student repeating EAMT 471 registers for EAMT 472 for credit. *Students may count a maximum of nine credits in independent studies towards their degree programme.

EAMT 498 Special Topics in Electroacoustics and Technology (3 credits)

Prerequisite: Written permission of the Depart-

ment of Music. An advanced study of a selected area not available in other courses in electro-acoustics and technology.

EAMT 499 Special Topics in Electroacoustics and Technology (6 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in electroacoustics and technology.

Integrative Music Studies:

INMS 209 Aural Perception I (3 credits)
Prerequisite: MUSI 200 or exemption. A course designed to develop the musical ear through sight-singing, dictation, aural analysis.
Classroom and laboratory.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 499 or MUSI 210 may not take this course for credit.

INMS 250 Music Theory I (6 credits)
Prerequisite: MUSI 200 or exemption. An extensive course in music theory, including diatonic harmony, counterpoint, and keyboard skills.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 499 or MUSI 210 may not take this course for credit.

INMS 310 Aural Perception II (6 credits)
Prerequisite: INMS 209 or exemption. A course in aural development through sight-reading, dictation, transcription and aural analysis.

NOTE A/See §200.3

INMS 320 Comparative Analysis I (6 credits)

Prerequisite: INMS 350 or exemption. Development of analytical methodology. Study of selected works representing various forms and styles from different historical periods. NOTE A/See §200.3

INMS 350 Music Theory II (6 credits)
Prerequisite: INMS 250 or exemption. A workshop in theory, studying further development in
chromatic harmony, counterpoint, and analysis.
Approaches may include compositional exercises.
NOTE A/See §200.3

NOTE: Students who have received credit for INMS 200 may not take this course for credit.

INMS 360 Music Composition I (6 credits)
Prerequisite: Written permission of the
Department of Music. A seminar/workshop in
composition. Emphasis is on the development of

the individual's composition skills.

NOTE A/See §200.3

NOTE: Students who have received credit for CMUS 320 may not take this course for credit.

INMS 398 Special Topics in Music Theory/Composition (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 399 Special Topics in Music Theory/Composition (6 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 410 Advanced Aural Training (6 credits)

Prerequisite: INMS 310 or exemption. An intensive study of selected problems in hearing, analysing, and transcribing music. The course combines individual and group exercises. NOTE A/See §200.3

INMS 450 Advanced Music Theory (6 credits)

Prerequisite: INMS 350 or exemption. Analytical and compositional study of chromatic harmony, counterpoint, and longer forms, focusing on the musical styles of the nineteenth and twentieth centuries. NOTE A/See §200.3

NOTE: Students who have received credit for INMS 300 may not take this course for credit.

INMS 460 Music Composition II (6 credits)

Prerequisite: INMS 360 and written permission of the Department of Music. A continuation of INMS 360. NOTE A/See §200.3 NOTE: Students who have received credit for CMUS 420 may not take this course for credit.

INMS 471* Independent Study I (3 credits)
Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of music theory, analysis, aural perception, orchestration, and/or related disciplines, and involves consultation with an adviser.

NOTE C/See §200.3

*Students may count a maximum of nine credits in independent studies towards their degree programme.

INMS 472* Independent Study II (3 credits)
Prerequisite: Written permission of the
Department of Music. A student repeating
INMS 471 registers for INMS 472 for credit.
*Students may count a maximum of nine credits
in independent studies towards their degree
programme.

INMS 498 Special Topics in Music
Theory/Composition (3 credits)
Prerequisite: Written permission of the Depart-

ment of Music. An advanced study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 499 Special Topics in Music Theory/Composition (6 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

Jazz Studies:

JAZZ 200 The Language of Jazz (6 credits)

An introduction to the syntax, style, aesthetics, and sociology of jazz. The complete spectrum of styles and artists serves as the basis of materials for the course. NOTE A/See §200.3 NOTE: Students who have received credit for CMUS 200 may not take this course for credit.

JAZZ 301 Jazz Harmony (3 credits)
Prerequisite: JAZZ 200; MUSI 200; or
exemptions. The basics of jazz harmony.
NOTE: Students who have received credit for
this topic under an INMS 498 number may not
take this course for credit.

JAZZ 302 Jazz Arranging I (3 credits)
Prerequisite: JAZZ 301. The introductory study
of writing arrangements based upon compositions from the American popular song and jazz
repertoires for small and medium-size jazz
ensembles. NOTE A/See §200.3
NOTE: Students who have received credit for
INMS 332 may not take this course for credit.

JAZZ 305 Jazz Composition I (6 credits)
Prerequisite: JAZZ 302. A seminar/workshop in
jazz composition. After an examination of
components of composition from the jazz
repertoire, students write original music based
on the blues, American popular song forms, and
such idioms as those in the style of bebop,
bossa nova, ragtime, and modal jazz.
NOTE A/See §200.3

NOTE: Students who have received credit for CMUS 330 may not take this course for credit.

JAZZ 398 Special Topics in Jazz Studies (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 399 Special Topics in Jazz Studies (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 401 Jazz Arranging II (3 credits)
Prerequisite: JAZZ 302. The continued study of writing arrangements for large ensembles including original compositions and jazz repertoire. NOTE A/See §200.3
NOTE: Students who have received credit for INMS 431 may not take this course for credit.

JAZZ 402 Jazz Arranging III (3 credits)
Prerequisite: JAZZ 401. The study of advanced techniques in jazz arranging. NOTE A/See §200.3 NOTE: Students who have received credit for INMS 432 may not take this course for credit.

JAZZ 405 Jazz Composition II (6 credits)
Prerequisite: JAZZ 305. A continuation of
JAZZ 305. NOTE A/See §200.3
NOTE: Students who have received credit for
CMUS 430 may not take this course for credit.

JAZZ 471** Independent Study I (3 credits)
Prerequisite: Second-year standing*, and written
permission of the Department of Music. A
student-designed course of study, approved by
an advisor, that focuses on an area of jazz
studies. NOTE C/See §200.3
*66 or fewer credits remaining in degree
programme.

**Students may count a maximum of nine credits in independent studies towards their degree programme.

JAZZ 472** Independent Study II (3 credits)
Prerequisite: JAZZ 471, second-year standing*,
and written permission of the Department of
Music. A student-designed course of study,
approved by an advisor, that focuses on an
area of jazz studies. NOTE C/See §200.3
*66 or fewer credits remaining in degree
programme.

**Students may count a maximum of nine credits in independent studies towards their degree programme.

JAZZ 498 Special Topics in Jazz Studies (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 499 Special Topics in Jazz Studies (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

Jazz Performance:

JPER 220 Jazz Ensemble I (6 credits)
Prerequisite: JAZZ 200 previously or
concurrently. A performance course in which

students participate in various Concordia jazz ensembles. NOTE A/See §200.3

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 300 may not take this course for credit.

JPER 321 Jazz Ensemble II (3 credits) Prerequisite: JPER 220. A continuation of JPER 220. NOTE A/See §200.3

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 401 may not take this course for credit.

JPER 330 Jazz Improvisation I (6 credits)
Prerequisite: JAZZ 301 previously or concurrently;
JAZZ 200. A performance-analysis course that
examines the craft of jazz improvisation. A
broad spectrum of jazz improvisational styles is
examined. Participation in public performance is
required.

NOTE: Students who have received credit for MPER 330 may not take this course for credit.

JPER 341 Jazz Vocal Repertoire I (3 credits)

Prerequisite: JAZZ 200; MUSI 231 in voice previously or concurrently. A study of jazz vocal technique through performance of representative compositions and arrangements, and study of professional recordings illustrative of various jazz vocal styles. Special focus is on performance styles as they relate to building audience-performer relationships. Students are expected to participate in public performances.

NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

JPER 398 Special Topics in Jazz Performance (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An study of a selected area not available in other courses in jazz performance.

JPER 399 Special Topics in Jazz Performance (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A study of a selected area not available in other courses in jazz performance.

JPER 421 Jazz Ensemble III (3 credits)
Prerequisite: JPER 321. A continuation of
JPER 321. NOTE A/See §200.3

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 402 may not take this course for credit.

JPER 422 Jazz Ensemble IV (3 credits)
Prerequisite: JPER 421. A continuation of
JPER 421. NOTE A/See §200.3

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

JPER 430 Jazz Improvisation II (6 credits)
Prerequisite: JPER 330. A continuation of
JPER 330.

NOTE: Students who have received credit for MPER 430 may not take this course for credit.

JPER 441 Jazz Vocal Repertoire II (3 credits)

Prerequisite: JPER 341. A continuation of JPER 341.

NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

JPER 471** Independent Study I (3 credits)
Prerequisite: Second-year standing* or equivalent,
and written permission of the Department of
Music. A student-designed course of study,
approved by an advisor, on an area of jazz
performance practice. When appropriate, the
study may include a performance.
*66 or fewer credits remaining in degree
programme.

**Students may count a maximum of nine credits in independent studies towards their degree programme.

JPER 472* Independent Study II (3 credits)
Prerequisite: JPER 471 and written permission
of the Department of Music. A student repeating
JPER 471 registers for JPER 472 for credit.
*Students may count a maximum of nine credits
in independent studies towards their degree
programme.

JPER 498 Special Topics in Jazz Performance (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced study of a selected area not available in other courses in jazz performance.

JPER 499 Special Topics in Jazz Performance (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced study of a selected area not available in other courses in jazz performance.

Music History:

MHIS 200 Music History and Society (6 credits)

A survey of musical styles in their social context, from pre-history to the present day. While emphasis is on the mainstream of the Western tradition, attention is also given to folk, popular, and jazz styles, as well as to the music of other cultures. NOTE A/See §200.3

MHIS 301 Medieval and Renaissance Music (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. The development of the basic patterns of Western

music is traced through the Middle Ages. The resulting musical styles from the mid-fifteenth to the end of the sixteenth century are examined in the context of the cultural changes which shaped the humanistic age.

NOTE: Students who have received credit for MHIS 311 or 312 may not take this course for

MHIS 302 Music of the Baroque (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. Representative works from the early seventeenth to the mid-eighteenth century. The evolution of

"common practice" is traced in the forms, styles, and performance practices of the great masters

and schools.

MHIS 303 Classical and Early Romantic Music (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. A study of late eighteenth- and early nineteenth-century music. Representative works will be studied from the late Rococo, through the age of Haydn, Mozart, and Beethoven, and into the early Romantic style of Schubert.

Romanticism in Music **MHIS 304**

(3 credits)

Prerequisite: MHIS 200; INMS 209, 250. A study of the music of the nineteenth and early twentieth century. Representative works, styles and performance practices are studied as expressions of the romantic consciousness.

MHIS 305 Music from the Post-Romantic to the Present (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. A study of music from the early twentieth century to the present. The roots of current trends in music are followed through their growth into the widely diverse styles of today.

MHIS 314 Jazz History (3 credits) Prerequisite: MHIS 200. A study of the historical

developments and the personalities that contributed to the evolution of jazz styles.

MHIS 471* Independent Study I (3 credits) Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of music history and/or related disciplines, and involves consultation with an adviser. NOTE C/See §200.3

*Students may count a maximum of nine credits in independent studies towards their degree programme.

Independent Study II (3 credits) MHIS 472*

Prerequisite: Written permission of the Department of Music. A student repeating MHIS 471 registers for MHIS 472 for credit. *Students may count a maximum of nine credits in independent studies towards their degree programme.

MHIS 498 Special Topics in Music History (3 credits)

Prerequisite: Twelve credits in Music and written permission of the Department of Music. A study of a selected period, area, or contribution. In a given year, the study may examine any significant aspect of Western, non-Western, or other musics. NOTE C/See §200.3

Music in Education:

MINE 301 Music for Classroom Use I (3 credits)

Prerequisite: Enrolment in the Specialization in Early Childhood Education, Major in Child Studies, or written permission of the Department of Music. This course is designed to give the student a working knowledge of contemporary techniques of group instruction in music. At least one established or experimental method is covered in some depth: for example, Orff, Kodaly, Dalcroze, Martentot, Schafer, Dennis. While the main emphasis is on the cultivation of musicality in the preschool and elementary school child. the implications for music education in general are also explored. Classroom work includes opportunities for demonstration and practice teaching.

NOTE A/See §200.3

Music Performance Studies:

MPER 201 Orchestra I (3 credits) Students enrolled in this course participate in the Concordia Orchestra.

NOTE: This is a full-year course.

MPER 231 Choir I (3 credits)

Students enrolled in this course participate in a Concordia choir.

NOTE A/See §200.3

NOTE: This is a full-year course.

NOTE: Students who have received credit for MPER 221 may not take this course for credit.

MPER 301 Orchestra II (3 credits)

Prerequisite: MPER 201. A continuation of MPER 201.

NOTE A/See §200.3

NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 498 or MPER 300 may not take this course for credit.

MPER 321 Chamber Ensemble I (3 credits)

A study, through performance, of selected works from a broad range of repertoires. The works studied are determined by class needs and the particular skills of each student. Participation in public performances is required. NOTE A/See §200.3

NOTE: This is a full-year course.

MPER 322 Chamber Ensemble II (3 credits)

Prerequisite: MPER 321. A continuation of MPER 321. NOTE A/See §200.3 NOTE: This is a full-year course.

MPER 331 Classical Vocal Repertoire I (3 credits)

Prerequisite: MUSI 200; MUSI 231 in voice previously or concurrently. A chronological study of the repertoire available to the solo singer. Vocal repertoire from the late Renaissance to the present is examined and performed by students. This seminar/workshop is based on a bibliography of selected readings, covering such topics as stylistic features, treatment of poetry and text, recital preparation, programming, vocal ornamentation, and recitative.

NOTE: This is a full-year course. NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

MPER 332 Choir II (3 credits)

Prerequisite: MPER 231. A continuation of MPER 231. NOTE A/See §200.3 NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 498 or MPER 420 may not take this course for credit.

MPER 370 Musical Performance Skills I (6 credits)

Prerequisite: MUSI 200; INMS 209. A seminar/ workshop on specific problems in learning, teaching, and developing musical performance skills. Included is the analysis and organization of practice technique, reading, memory, performance practices, style, interpretation, accompaniment, and recital preparation. Particular attention is given to the integration of skill with musical understanding. NOTE A/See §200.3

MPER 390 Advanced Private Study I (6 credits)

Prerequisite: MUSI 230 or MUSI 231 and 232; enrolment in the Specialization in Music Performance Studies; written permission of the Department of Music. This course offers intensive vocal or instrumental instruction for students specializing in performance. A juried examination is required. NOTE A/See §200.3 NOTE: Students are required to bear part of the cost of private lessons.

NOTE: Students who have received credit for MUSI 330 may not take this course for credit.

MPER 398 Special Topics in Music Performance (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music performance.

MPER 399 Special Topics in Music Performance (6 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music performance.

MPER 401 Orchestra III (3 credits)
Prerequisite: MPER 301. A continuation of
MPER 301. NOTE A/See §200.3

NOTE: This is a full-year course. NOTE: Students who have received credit for this course as MPER 498 or MPER 400 may not take this course for credit.

MPER 421 Chamber Ensemble III (3 credits)

Prerequisite: MPER 322. A continuation of MPER 322. NOTE A/See §200.3 NOTE: This is a full-year course.

MPER 422 Chamber Ensemble IV (3 credits)

Prerequisite: MPER 421. A continuation of MPER 421. NOTE A/See §200.3 NOTE: This is a full-year course.

MPER 431 Classical Vocal Repertoire II (3 credits)

Prerequisite: MPER 331. A continuation of MPER 331.

NOTE: This is a full-year course.

NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

MPER 432 Choir III (3 credits) Prerequisite: MPER 331. A continuation of MPER 331. NOTE A/See §200.3 NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 498 or MPER 420 may not take this course for credit.

MPER 441 Performance Practice/ Documentation (3 credits)

Prerequisite: Written permission of the Department of Music. A study of historical sources applied directly to performance. Topics covered include ornamentation, improvisation, figured bass, "The Doctrine of the Affections", early notation, and bibliography.

MPER 442 Performance Practice/ Documentation (3 credits)

Prerequisite: MPER 441. A continuation of MPER 441.

MPER 470 Musical Performance Skills II (6 credits)

Prerequisite: MPER 370. A continuation of MPER 370. NOTE A/See §200.3

MPER 471* Independent Study I (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of performance practice, performance theory/analysis, pedagogy, and/or related disciplines, and involves consultation with an adviser. When appropriate, the study may include a demonstration/performance. NOTE C/See §200.3

*Students may count a maximum of nine credits in independent studies towards their degree programme.

MPER 472* Independent Study II (3 credits)
Prerequisite: Written permission of the
Department of Music. A student repeating
MPER 471 registers for MPER 472 for credit.
*Students may count a maximum of nine credits
in independent studies towards their degree
programme.

MPER 490 Advanced Private Study II (6 credits)

Prerequisite: MUSI 330, or MUSI 331 and 332, or MPER 390; enrolment in the Specialization in Music Performance Studies; third-year standing*; written permission of the Department of Music. A continuation of MPER 390. An approved public recital may be substituted for the juried examination.

NOTE A/See §200.3

NOTE: Students are required to bear part of the cost of private lessons.

*33 or fewer credits remaining in degree programme.

MPER 498 Special Topics in Music Performance (3 credits)

Prerequisite: Written permission of the Depart-

ment of Music. A seminar/workshop in performance. Selected problems in the development of performance skills. The areas covered are, whenever possible, determined by the specific interests of the students. Topics in any given year may include technique, practice, style, interpretation, accompaniment, ensemble, teaching children, the adult student.

NOTE A, C/See §200.3

MPER 499 Special Topics in Music Performance (6 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in performance. Selected problems in the development of performance skills. The areas covered are, whenever possible, determined by the specific interests of the students. Topics, in any given year, may include technique, practice, style, interpretation, accompaniment, ensemble, teaching children, the adult student. NOTE A,C/See §200.3

81.110

STUDIO ARTS

Faculty

PENELOPE COUSINEAU-LEVINE, Associate Professor

Professors YVES GAUCHER LEOPOLD PLOTEK MARION WAGSCHAL IRENE WHITTOME

Associate Professors
GISELE AMANTEA
RAYMONDE APRIL
YVES BILODEAU
THÉRÈSE CHABOT
TIM CLARK
ANDREW DUTKEWYCH
A. LUNT EVERGON
JUDY GARFIN
TREVOR GOULD
LYNN HUGHES

DANICA JOJICH
CHERYL KOLAK-DUDEK
WOLFGANG KROL
BARBARA LAYNE
DAVID MOORE
FRANÇOIS MORELLI
MARK RUWEDEL
LEILA SUJIR
KATHERINE TWEEDIE
JANET WERNER

Assistant Professors INGRID BACHMANN SHAWN BAILEY DAVID ELLIOT

Adjunct Professor KATHRYN LIPKE

Adjunct Associate Professor RUSSELL GORDON

Location

Sir George Williams Campus Visual Arts Building, Room: VA 236 (514) 848-4262/4263

Department Objectives

The Department of Studio Arts offers programmes that emphasize the importance of practical work with practising artists. Through a series of courses in ceramics, drawing, fibres, painting, photography, print media, and sculpture, students increase their awareness of what constitutes creativity and understanding of the aesthetic and intellectual aspects of art today. In addition, the Department offers a programme in Interdisciplinary Studies for students whose work extends beyond the boundaries of traditional disciplines in the Fine Arts, as well as a programme in Women and the Fine Arts, which allows students to complete interdisciplinary work associated with the issue of gender in the arts.

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.

The superscript indicates credit value.

81.110.1

STUDIO ART

Programme Objective

The Major in Studio Arts offers students the freedom for exploration while still developing proficiency within a disciplinary core. The programme encourages the cross-referencing of different creative traditions within a solid, historical, theoretical and studio foundation. Its primary objective is to give students the choice to define their own needs in tailoring an individualized programme of studies within open parameters. Students are encouraged to choose among a series of studio art electives and progressively establish their concentration or concentrations through required higher-level disciplinary courses. While promoting a respect for disciplines, the programme stresses diversity and versatility across studio options.

Students may select their 48 studio art credits required in any media. There is also a similar range from which students can select 12 credits in Art History. Within these specifications, students may fulfil the requirements of the Major in Studio Art either by specializing in a meduim or combining studios in a number of them. However, students must complete one studio course at the 300 level (intermediate) and meet the 400 level (advanced) in the same discipline to fufil their requirements.

Programme

60 BFA Major in Studio Art

- 6 Chosen from SFAR 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser
- 6 Chosen from ART 261⁶, 460⁶; SCUL 465⁶ or Art History electives

- DRAW 2006 6
- 6 Art History electives
- 24 Studio Art electives*
- 300 and 400 level in a single medium from one of the following disciplines: Ceramics; Drawing; Fibres; Painting; Print Media; Sculpture.

*Studio Art courses offered by the Department of Design Art and the Department of Art Education and Art Therapy may be selected as Studio Art electives, but these credits do not satisfy the 300and 400-level sequence requirements.

Admission to the Major in Studio Art

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Studio Art.

All applicants must submit a portfolio of their own work, as well as a letter of intent as part of the admission process. In addition to recommending admission to a programme, the Portfolio Evaluation Committee may recommend the completion of either SFAR 250, 260, or 270 as part of a student's

- Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- Portfolios should consist of both two-dimensional and three-dimensional work in a variety of
- Individual works must be labelled including applicant's name, date, size of work, and medium(s) 3.
- 4. Each portfolio must contain a list of contents including all the above information.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- Portfolios should include a copy of recent academic record.
- Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense.
- Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
- 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her programme choices, even if these choices are within the same department.

Applicants must submit this portfolio to the Department of Studio Arts, Visual Arts Building, Room 237, between March 8 - 21, 2000 (4:00 PM).

81.110.2

CERAMICS

Programme Objective

Ceramics offers students a unique opportunity to develop the production of individual studio work in a context in which contemporary art-making practice is linked to a rich and diverse material history. A vital programme within the Studio Arts Department, courses in Ceramics regularly include special collaborative projects, field trips and visiting artists. In addition, the Ceramics programme can also provide students with an important point of departure for investigating diverse subjects ranging from traditional craft practice to new technology.

Well-equipped studios and scheduled labs afford students the means to develop technical skills and to seek information specific to their needs. Course content at all levels of the programme includes seminar discussion pertinent to both students' work and concerns related to the current practice of ceramics. At an advanced level and in consultation with an adviser, students in Ceramics have the opportunity to pursue independent-study courses.

Programme

- 60 **BFA Major in Ceramics**
- CERA 230⁶, 330⁶, 430⁶; SCUL 465⁶; DRAW 200⁶ ARTH 264³, 350³ 30
- 6
- 6 Art History electives*
- SCUL 2006; FBRS 2406, 2606, 3706 6
- Electives from Ceramics, Fibres, or Sculpture 6
- Chosen from SFAR 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser** *With permission of the Department, students may substitute ART 261⁶ or ART 460⁶ for six electives in Art History.
- **Recommended to be taken in the first year.

Admission to the Major in Ceramics

Applicants to Ceramics may apply to enter directly into the Major in Ceramics, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Ceramics.

All applicants must submit a portfolio as part of the admission process.

- Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- Portfolios should consist of both two-dimensional and three-dimensional work in a variety of
- 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used.
- Each portfolio must contain a list of contents including all the above information. 4.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense.
- Portfolios must consist of approximately 50% three-dimensional work and include work in the area to which the student is applying.
- Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
- 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her programme choices, even if these choices are within the same department.
- 11. Portfolios must be submitted to the Department of Studio Arts between March 8 21, 2000

Examples of three-dimensional work should include work in at least two mediums, and should demonstrate creative ability. The two-dimensional work should demonstrate an ability to draw, compose, and use colour imaginatively and creatively.

FIBRES 81.110.3

Programme Objective

Fibres is a cross-media programme of study that explores the relationship of materials to culture. Informed by discourses of post-modernism, feminism, and traditional aesthetics, the Fibres programme offers an opportunity for intensive study, both practical and theoretical, of the art, technology and history of textiles. Such creative and critical investigation, allied with technical proficiency, provides the base students need to develop as young artists.

Courses are available at all levels, ranging from beginner classes to independent study for advanced students wishing to focus on a single project. Students concentrating in other areas of Fine Arts are welcome to take most courses offered in the Fibres area.

Programme

60 **BFA Major in Fibres**

- FBRS 240⁶, 260⁶; SCUL 465⁶ 18
- FBRS 340⁶ or 360⁶ 6
- 6 FBRS 480⁶
- ARTH 266³, 352³ 6
- Art History electives* 6
- 6
- SCUL 200⁶; DRAW 200⁶; CERA 230⁶ Chosen from SFAR 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser**
- Electives from Ceramics, Fibres, or Sculpture

*With permission of the Department, students may substitute ART 2616 or ART 4606, for six electives in Art History.

**Recommended to be taken in the first year.

Admission to the Major in Fibres

Applicants to Fibres may apply to enter directly into the Major in Fibres, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Fibres.

All applicants must submit a portfolio as part of the admission process.

- Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- 2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums.
- 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s)
- Each portfolio must contain a list of contents including all the above information.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense.
- Portfolios must consist of approximately 50% three-dimensional work and include work in the area to which the student is applying.

- 9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
- 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her programme choices, even if these choices are within the same department.
- Portfolios must be submitted to the Department of Studio Arts between March 8 21, 2000 (4:00 PM).

Examples of three-dimensional work should include work in at least two mediums, and should demonstrate creative ability. The two-dimensional work should demonstrate an ability to draw, compose, and use colour imaginatively and creatively.

81.110.4

INTERDISCIPLINARY STUDIES

Programme Objective

The Major in Interdisciplinary Studies offers the possibility of working towards the completion of a programme that permits the student to investigate and integrate a very wide range of disciplines — music, painting, photography, dance, theatre, sound-based work, drawing, computer imaging, writing as art, performance art, installations, sculpture, fibres, print media, book works, video, and ceramics. In support of this interdisciplinary activity, the Department has established a curricular structure whereby each student, with the assistance of a faculty member, may develop a sequential programme of study that allows for both vertical and lateral movements within the visual and performing arts areas. Furthermore, specialized IDYS studio/seminar courses are provided so that students can work together on both individual and collective projects.

Programme

60 BFA Major in Interdisciplinary Studies

- 24 IDYS 200⁶, 300⁶; FFAR 250⁶; and a six-credit studio course in the Visual or Performing Arts
- 6 VDEO 350°, or lecture/seminar elective(s)in the Visual or Performing Arts, chosen in consultation with the Interdisciplinary Studies Advisory Committee
- 6 Chosen from VDEO 3006; ARTE 4306; ART 4176
- 24 electives from Visual and/or Performing Arts, chosen in consultation with the Interdisciplinary Studies Advisory Committee

Admission to the Major in Interdisciplinary Studies

The Interdisciplinary Studies Major has a distinct admission procedure in addition to the normal admission process of Concordia University. All applicants are required to attend an *interview* and present an *audition* or *portfolio* as part of the admission process. Applicants must contact the programme office between March 1 – 12 to arrange their appointments and for detailed information regarding audition/portfolio/interview requirements. Applicants must also submit a *letter of intent* along with a copy of their academic record directly to the programme coordinator at the same time that they submit their completed application to the Office of the Registrar, i.e. prior to March 1. This short letter of intent should summarize the applicant's academic and artistic backgrounds and describe their particular interests and goals in Interdisciplinary Studies within Fine Arts.

81.110.5

PAINTING AND DRAWING

Programme Objective

The Department of Studio Arts provides an in-depth programme in Painting and Drawing, combining theoretical, historical, and practical study at all undergraduate levels. The aim is to provide students with a broad foundation on which they can base their own creative contributions.

Studio courses, seminars, and independent projects on such varied topics as open media, collage, and women's studies, supplement the core courses on painting and drawing. Recognizing the importance of providing basic skills and knowledge, in an atmosphere of freedom, the programme is supported by a large number of faculty and guest artists, exposing students to a full range of approaches to drawing and painting.

A graduate programme in Painting and Drawing and Open Media is available for further studies.

Programme

60 BFA Major in Painting and Drawing

- 12 DRAW 200⁶, 300⁶
- 12 PTNG 200⁶, 300⁶
- 12 Chosen from ART 320⁶, 420⁶; DRAW 420⁶; PTNG 420⁶
- 6 Chosen from SFAR 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser
- 6 ARTH 366³ and 367³
- 6 Studio Art elective (excluding ART, PTNG, and DRAW courses)
- 6 Chosen from ART 261⁶, 460⁶ or Art History electives (excluding ARTH 433⁶, 434⁶), in consultation with an adviser

Admission to the Major in Painting and Drawing

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Painting and Drawing.

All applicants must submit a portfolio of their own work, as well as a letter of intent as part of the admission process.

- Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- Portfolios should consist of both two-dimensional and three-dimensional work in a variety of
- 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used.
- 4. Each portfolio must contain a list of contents including all the above information.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- Portfolios should include a copy of recent academic record.
- Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense.
- Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
- It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her programme choices, even if these choices are within the same department.
- 11. Portfolios must be accompanied by a letter of intent explaining the applicant's special interests in painting and drawing.

Applicants must bring both their portfolios and their letters of intent to the Department of Studio Arts. Visual Arts Building, Room 237, between March 8 – 21, 2000 (4:00 PM).

81.110.6

PHOTOGRAPHY

Programme Objective

The Photography programme acknowledges photography as a discipline with a distinct artistic and historical identity. It also recognizes that contemporary photographic practice encompasses a rich multiplicity of formal and conceptual approaches. The course structure of the programme and the orientation of its faculty reflect a concern that the students receive a strong historical and theoretical comprehension of the medium. The programme stresses the need for students to acquire the concepts and vocabulary necessary for critical discussion of their own photographic work and that of others. Emphasis is placed on the understanding of photography's sociological and artistic ramifications.

Programmes

- 60
- **BFA Major in Photography** PHOT 200^6 , 250^6 , 300^6 , 311^3 , 321^3 , 341^3 , 400^6 33
- 9 Photography electives
- Art History electives 6
- Visual Arts electives 12

30 Minor in Photography

- 12 PHOT 2006, 2506
- 12 Chosen from PHOT 300⁶, 311³, 312³, 321³, 322³, 341³, 398³, 399⁶, 498³
- Photography or Visual Arts electives

Admission to the Major or Minor in Photography

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major and Minor in Photography. Applicants must submit a portfolio, along with a letter of intent and a recent transcript; an interview may be required. Portfolios must be submitted to the Department of Studio Arts between March 8 – 21, 2000.

81.110.7

PRINT MEDIA

Programme Objective

The Print Media programme provides students with a milieu to investigate the meaningful relationships that exist between the technologies of reproduction, individual expression, and contemporary society.

Print Media offers multiple venues for student research from intaglio, lithography, and serigraphy to digital and virtual approaches. Experimental, innovative, and critical work is encouraged. Special topics and theory courses provide support for individual aesthetic development and explore the intersections of interdisciplinary practice.

Students in the Print Media programme are expected to develop a strong critical understanding of their work and its relationship to contemporary society, as well as develop professional skills and an awareness of the diversity inherent in art practice.

The 60-credit BFA Major in Print Media and the 30-credit Minor in Print Media were first offered in their new form in September 1997.

Programme

60 BFA Major in Print Media

- 36 Print Media:
- 6-12 Credits at the 200 level
- 12-24 Credits at the 300 level
- 6-18 Credits at the 400 level
 - 6 Studio Art elective credits
 - 6 Fine Arts elective credits
 - 6 Art History elective credits
 - 6 Art History or Art Theory elective credits

30 Minor in Print Media

- 18 Print Media:
- 3-9 Credits at the 200 level
- 6-9 Credits at the 300 level
- 3-9 Credits at the 400 level
 - 6 Studio Art elective credits
 - Fine Arts elective credits

Admission to the Major or Minor in Print Media

Applicants to Print Media may apply to enter directly into the Major in Print Media or may enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Print Media. All applicants must submit a *portfolio*, as well as a *letter of intent*, as part of the admission process.

- 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums.
- 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s)
- 4. Each portfolio must contain a list of contents including all the above information.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- 6. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- Out-of-town applicants may submit slides (photographs if slides are not available) of their work.
 Applicants must make arrangements to ensure the return of their portfolios at their own
 expense. In addition, for the Major/Minor in Print Media:
- Portfolios must contain a minimum of 10 works in drawing and/or prints.
- 9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
- 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her programme choices, even if these choices are within the same department.
- Portfolios must be submitted to the Department of Studio Arts between March 8 21, 2000 (4:00 PM).

81.110.8

SCULPTURE

Programme Objective

The Sculpture programme offers the opportunity for intensive study, both practical and theoretical, of the art and technology of sculpture. Within the Fine Arts curriculum, these courses help students to explore the relationship between object, material, and space. Such creative investigation, allied with technical proficiency, provides the base students need to develop as young artists.

Courses are available at all levels, ranging from beginner classes to independent study for advanced students wishing to focus on a single project. To enrich their artistic training, students concentrating in other areas of Fine Arts may also take most courses offered in sculpture.

Programme

60 BFA Major in Sculpture

- 36 SCUL 2006, 3006, 4006, 4656, 4906; DRAW 2006
- 12 Art History electives*
- 6 Chosen from the Department of Studio Arts
- 6 Chosen from a Studio Art elective, in consultation with an adviser**
- *With permission of the Department, students may substitute ART 261⁶ or ART 460⁶, for six electives in Art History.
- **Recommended to be taken in the first year.

Admission to the Major in Sculpture

Applicants to Sculpture may apply to enter directly into the Major in Sculpture, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to Sculpture. All applicants must submit a *portfolio* as part of the admission process.

- 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
- Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums.
- Individual works must be labelled including applicant's name, date, size of work, and medium(s) used.
- 4. Each portfolio must contain a list of contents including all the above information.
- Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.
- 6. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
- 7. Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense.
- 8. Portfolios must consist of approximately 50% three-dimensional work and include work in the area to which the student is applying.
- 9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
- 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her programme choices, even if these choices are within the same department.
- Portfolios must be submitted to the Department of Studio Arts between March 8 21, 2000 (4:00 PM).

Examples of three-dimensional work should include work in at least two mediums, and should demonstrate creative ability. The two-dimensional work should demonstrate an ability to draw, compose, and use colour imaginatively and creatively.

81.110.9

WOMEN AND THE FINE ARTS

Programme

- 24 Minor in Women and the Fine Arts
- 6 WFAR 320⁶
- 6 WSDB 290³, 291³
- 12 Electives in the Faculty of Fine Arts, chosen with the permission of a programme adviser

Admission to the Minor in Women and the Fine Arts In addition to submitting a completed official application form to the Office of the Registrar by March 1, applicants seeking admission to the Minor in Women and the Fine Arts must send a copy of their academic record and a letter of intent explaining their interest in the Minor to the Coordinator of the programme by March 1, 2000.

Courses

Art:

ART 261 Aesthetic Inquiry in Visual Arts (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. A seminar addressing the principles and theories relating to the objects and events of visual arts. Topics include the artistic process as expression, intuition, and imagination. Further consideration is given to the products of painting, sculpture, and graphics, emphasizing various contemporary critical and theoretical stances.

NOTE A/See §200.3

ART 320 Studio/Seminar in Painting and Drawing (6 credits)

Prerequisite: DRAW 200; PTNG 200; ART 261 or written permission of the Department. A combination studio/seminar in which advanced ideas in painting and drawing are addressed. Special topics of approximately one month duration are presented by guest artists from within and outside the Faculty.

ART 417 Open Media (6 credits)

Prerequisite: Thirty credits in Studio Art; 400-level studio courses concurrently; or written permission of the Department. A seminar encompassing an unlimited range and combination of materials.* The varied nature of this approach invites students to provide their own circumstances for creating work. NOTE A/See §200.3

*Students are required to bear the cost of materials and, when loan arrangements cannot be made through the University, equipment rental.

ART 420 Materials and Methods of the Artist (6 credits)

Prerequisite: DRAW 300; PTNG 300 or written permission of the Department. Through a series of special projects in the media of drawing and painting, this course familiarizes the student with some of the historical materials, techniques, and other aspects of the artist's concerns. NOTE: Students who have credit for ART 234 or ARTH 267 or 434 may not take this course for credit.

ART 460 Analysis of Great Works of Art (6 credits)

A course in art principles. Through the formal analysis of selected masterpieces of painting and sculpture, the student is led to a fuller comprehension of the nature of formal order in the arts. NOTE A/See §200.3

Ceramics:

CERA 230 Ceramics I (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An introduction to clay as an art medium employing the various techniques of forming, shaping, and decorating for firing and glazing.

NOTE A/See §200.3

CERA 330 Ceramics II (6 credits)

Prerequisite: CERA 230 or permission of the coordinator. An advanced course in technical and historical research in various ceramic processes with an emphasis on glazes and the use of different clay bodies. NOTE A/See §200.3

CERA 398 Special Topics in Ceramics (3 credits)

Prerequisite: Third-year standing* and written permission of the Department. A workshop/ seminar, providing an opportunity for the study of specialized aspects of ceramics.

NOTE C/See §200.3

*fewer than 33 credits remaining in the degree programme.

CERA 399 Special Topics in Ceramics (6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in ceramics. NOTE C/See §200.3

CERA 430 Ceramics III (6 credits) Prerequisite: CERA 330 or permission of the coordinator. The development of a body of personal work and a refinement of specific problems in clay.

CERA 450 *Independent Study* (6 credits)
Prerequisite: Third-year standing*; CERA 430,
previously or concurrently; and written permission of the Department. This workshop provides
the opportunity for a limited number of students
to independently pursue advanced studies in
ceramics. *NOTE A/See* §200.3

*fewer than 33 credits remaining in the degree programme.

Drawing:

DRAW 200 Drawing I (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An exploration of drawing as a means of expression. Various media are employed to examine and express form, space, figurative, and other graphic images. Drawing from observation, imagination, and memory is included. NOTE A/See §200.3

DRAW 300 Drawing II (6 credits)

Prerequisite: DRAW 200. A drawing course in which various media and forms of expression are explored at the more advanced level.

Lectures and studio periods.

NOTE A/See §200.3

DRAW 399 Special Topics in Drawing (6 credits)

Prerequisite: DRAW 200; written permission of the Department. A studio course which provides an opportunity for the study of more specialized aspects of drawing.

DRAW 400 Drawing III (6 credits) Prerequisite: DRAW 300. Continuation of DRAW 300. NOTE A/See §200.3

DRAW 420 Seminar/Workshop in Drawing (6 credits)

Prerequisite: ART 320 or written permission of the Department. An advanced studio in drawing having its principal emphasis in studio practice, but developing further the theoretical concepts introduced in ART 320.

DRAW 450 Advanced Studio in Drawing (6 credits)

Prerequisite: DRAW 400. A continuation of DRAW 400.

DRAW 470 Independent Study (6 credits) Prerequisite: DRAW 420 previously or concurrently, or written permission of the Department. A course of independent study in which the advanced student explores a specific area of drawing. NOTE A/See §200.3

DRAW 498 Special Topics in Drawing (3 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in drawing.

NOTE C/See §200.3

*fewer than 33 credits remaining in degree programme.

DRAW 499 Special Topics in Drawing (6 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in drawing.

NOTE C/See §200.3

*fewer than 33 credits remaining in degree programme.

Fibres:

FBRS 240 Fibre Structures I (6 credits)
Prerequisite: Enrolment in a BFA programme or
written permission of the Department. An introductory course in which students explore the

expressive potential of various materials and processes of fibre structures such as loom weaving, feltmaking, basketry, surface applications, and other experimental constructions. NOTE A/See §200.3

FBRS 260 Textile Printing and Dyeing I (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An introductory course in which students explore the creative potential of printing, painting, dyeing, resist work, and construction with fabric. NOTE A/See §200.3

FBRS 340 Fibre Structures II (6 credits)
Prerequisite: FBRS 240 or permission of the
coordinator. An intermediate level course which
emphasizes the visual and conceptual development of the student in fibre media. Complex
woven structures, painting and dyeing, fibre
sculpture, and other experimental approaches
are explored.

FBRS 360 Textile Printing and Dyeing II (6 credits)

Prerequisite: FBRS 260 or permission of the coordinator. An intermediate level course in textile printing and dyeing with an emphasis on content. Students investigate traditional and non-traditional approaches such as resist work, discharge, and photo processes.

FBRS 370 Papermaking (6 credits)
Prerequisite: Eighteen credits in Studio Art, or permission of the coordinator. The making of paper and its use as a medium of expression. The scope of investigation ranges from surface and image to embossing, casting, and three-dimensional construction.

FBRS 398 Special Topics in Fibres (3 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for study of specialized aspects of fibres. NOTE C/See §200.3

FBRS 399 Special Topics in Fibres (6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in fibres. NOTE C/See §200.3

FBRS 450 *Independent Study* (6 credits)
Prerequisite: Third-year standing*; FBRS 480,
previously or concurrently; and written permission
of the Department. This workshop provides the
opportunity for a limited number of students to
independently pursue advanced studies in Fibres.
*fewer than 33 credits remaining in the degree
programme.

FBRS 480 Advanced Fibres (6 credits)
Prerequisite: FBRS 340 or 360, or permission of
the coordinator. An advanced level course in
which students create a personal body or work,

refine technical expertise, and develop a visual and critical language related to fibres and textiles. NOTE C/See §200.3

Interdisciplinary Studies:

IDYS 200 Studio Seminar in Interdisciplinary Studies I (6 credits)

Prerequisite: Enrolment in the Major in Interdisciplinary Studies or written permission of the Interdisciplinary Studies programme coordinator. A studio/seminar course providing the basis for an interwoven theory and practice in an interdisciplinary context. An art practice is developed through a critical approach to materials, issues, and artmaking. Required readings pertinent to current issues are discussed in relation to studio production.

NOTE: With permission of the appropriate Department Chair, this course may satisfy a studio or seminar elective requirement in a student's degree programme. Students are required to bear the costs of materials and processing, if applicable.

IDYS 300 Studio Seminar in Interdisciplinary Studies II (6 credits)

Prerequisite: Interdisciplinary Studies 200, and second-year standing* in the Major in Interdisciplinary Studies, or written permission of the Interdisciplinary Studies programme coordinator. A practice-oriented seminar focusing on topics central to the interdisciplinary study of art in contemporary social and cultural contexts. Issues within areas such as history, gender, race, and technology are considered within the context of varying perspectives. Students' studio production is challenged within a contemporary interdisciplinary environment.

NOTE: With permission of the appropriate Department Chair, this course may satisfy a studio or seminar elective requirement in a student's degree programme. Students are required to bear the costs of materials and processing, if applicable.

*66 or fewer credits remaining in degree programme.

IDYS 490 Independent Study (6 credits) Prerequisite: Third-year standing* and written permission of the Interdisciplinary Studies programme coordinator. A course of independent study in which the student explores a specific interdisciplinary project.

*33 or fewer credits remaining in degree programme.

IDYS 491 Independent Study I (3 credits) Prerequisite: Third-year standing* and written permission of the Interdisciplinary Studies programme coordinator. A course of independent study in which the student explores a specific interdisciplinary project.

NOTE C/See §200.3

*33 or fewer credits remaining in degree programme.

IDYS 492 Independent Study II (3 credits)
Prerequisite: IDYS 491 and written permission
of the Interdisciplinary Studies programme
coordinator. A student who has completed
IDYS 491 may register under 492.

IDYS 498 Special Topics in Interdisciplinary Study (3 credits)

Prerequisite: Written permission of the Interdisciplinary Studies programme coordinator. An intensive study of specific aspects of interdisciplinary study.

IDYS 499 Special Topics in Interdisciplinary Study (6 credits)

Prerequisite: Written permission of the Interdisciplinary Studies programme coordinator. An intensive study of specific aspects of interdisciplinary study.

Painting:

PTNG 200 Painting I (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An exploration of painting, colour, style, image, visual skills, and the technology of painting materials. NOTE A/See §200.3

PTNG 300 Painting II (6 credits)
Prerequisite: PTNG 200. A course in which various media and forms of expression are explored at the more advanced level.

NOTE A/See §200.3

PTNG 399 Special Topics in Painting (6 credits)

Prerequisite: PTNG 200; written permission of the Department. A studio course which provides an opportunity for the study of more specialized aspects of painting.

PTNG 400 Painting III (6 credits)
Prerequisite: PTNG 300. A continuation of
PTNG 300. NOTE A/See §200.3

PTNG 420 Seminar/Workshop in Painting (6 credits)

Prerequisite: ART 320 or written permission of the Department. An advanced studio in painting having its principal emphasis in studio practice, but developing further the theoretical concepts introduced in ART 320. NOTE A/See §200.3

PTNG 430 Women and Painting (6 credits)
Prerequisite: Written permission of the Department. A studio/seminar course in which students are encouraged to explore their world in painting and consider their practice from the point of view of women's experience, individually and collectively. NOTE A/See §200.3

PTNG 440 Collage (6 credits)
Prerequisite: Written permission of the Department. An exploration of collage as a means of expression evolving from the historical and artistic traditions of painting and drawing.

NOTE A/See §200.3

PTNG 450 Advanced Studio in Painting (6 credits)

Prerequisite: PTNG 400. A continuation of PTNG 400. NOTE A/See §200.3

PTNG 470 Independent Study (6 credits)
Prerequisite: PTNG 420 previously or concurrently, or written permission of the Department.
A course of independent study in which the advanced student explores a specific area in painting. NOTE A/See §200.3

PTNG 498 Special Topics in Painting (3 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in painting. NOTE C/See §200.3 *fewer than 33 credits remaining in degree programme.

PTNG 499 Special Topics in Painting (6 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in painting.

NOTE C/See §200.3

*fewer than 33 credits remaining in degree programme.

Photography:

PHOT 200 Foundations in Photographic Vision: Theory and Practice I (6 credits)

Prerequisite: Enrolment in the Major or Minor in Photography or second-year standing* in a Specialization/Major in the Faculty of Fine Arts**. An exploration of the aesthetics of photography through the rapid accumulation of images in the field and through the study of contact sheets and prints in the studio. Emphasis is placed upon developing an ability to see photographically. Technical procedures, including optical functions and the camera, photographic chemistry, film and paper processing are taught. NOTE A/See §200.3

*fewer than 66 credits remaining in degree programme.

**Students enrolled in a Specialization/Major in Performing Arts or the Major in Interdisciplinary Studies must obtain written permission of the Department.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 250 Development of Photographic Traditions (6 credits)

Prerequisite: Enrolment in the Major or Minor in Photography, or second-year standing* in a Specialization/Major in the Faculty of Fine Arts, or written permission of the Department. A course

tracing the development of photography from its earliest appearance to the present. Issues are dealt with historically and thematically and include ideas about photographs as documents, means of social criticism, forms of personal expression, and sequential imagery. Reference is made to the relationship between photographs and other forms of art, and to the social or political contexts which influenced its development. *fewer than 66 credits remaining in degree programme.

PHOT 300 Photographic Vision: Theory and Practice II (6 credits)

Prerequisite: PHOT 200 and 250 and enrolment in the Major or Minor in Photography, or written permission of the Department. A course in which the student is encouraged to refine and enhance a photographic vision. The course focuses on individual exploration in a context of exchange, discussion, and research. A written proposal in the second semester leads to the completion of a final portfolio.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 311 Large Format Photography I (3 credits)

Prerequisite: PHOT 200 and 250 and enrolment in the Major or Minor in Photography, or written permission of the Department. A studio course introducing large format photography, its techniques and application. Field trips and demonstrations cover the basics of view camera operation, light metering, sheet film exposure, development, and advanced printing. Assignments based on traditional genres encourage ease with all aspects of large format use and their personal applications. NOTE: Students who have received credit for PHOT 310 may not take this course for credit. NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 312 Large Format Photography II (3 credits)

Prerequisite: PHOT 200, 250, 311 and enrolment in the Major or Minor in Photography, or written permission of the Department. A studio course directed towards the development of an individual approach to view camera photography. Various uses of advanced techniques are also discussed. Emphasis is put on the development of a coherent portfolio of prints expressing personal concerns.

NOTE: Students who have received credit for PHOT 310 may not take this course for credit. NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 321 Colour Photography I (3 credits)

Prerequisite: PHOT 200 and 250 and enrolment in the Major or Minor in Photography, or written

permission of the Department. An introductory studio course investigating the technical and creative aspects of colour photography. Students learn practical methods of colour printing using the positive-negative process and are encouraged to use these techniques in a self-expressive manner. A brief historical survey of colour processes is presented.

NOTE: Students who have received credit for PHOT 320 may not take this course for credit. NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 322 Colour Photography II (3 credits)

Prerequisite: PHOT 200, 250, 321 and enrolment in the Major or Minor in Photography, or written permission of the Department. A continuation of PHOT 320, this course explores further techniques in colour photography and advanced colour printing. Aesthetic issues such as changing attitudes towards the colour medium and its role in documentary work are discussed. A final portfolio reflects the students' personal approach to colour photography.

NOTE: Students who have received credit for PHOT 320 may not take this course for credit. NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 341 Introduction to Contemporary Issues in Photography (3 credits)

Prerequisite: PHOT 250 and enrolment in the Major or Minor in Photography, or written permission of the Department. A seminar course exploring various theoretical approaches to contemporary photographic practice. Readings will form the basis of discussions, which will be complemented by lectures, guests, visits to exhibitions, and other relevant activities. Varied critical approaches will be introduced. Students are expected to produce short essays and complete one major research paper. Required texts will vary from year to year. NOTE: Students who have received credit for PHOT 340 may not take this course for credit.

PHOT 398 Special Topics in Photography (3 credits)

Prerequisite: Written permission of the Department. An opportunity for the study of limited and more specialized aspects of photography. NOTE C/See §200.3

PHOT 399 Special Topics in Photography (6 credits)

Prerequisite: Written permission of the Department. An opportunity for the study of limited and more specialized aspects of photography. NOTE C/See §200.3

PHOT 400 Advanced Workshop in Photography (6 credits)

Prerequisite: PHOT 300 and third-year standing*

in the Major in Photography, or written permission of the Department. A studio course in which students pursue one or more extended photographic projects in black and white and/or colour. Topics related to contemporary photography are presented in a seminar fashion.

NOTE: Each student's personal work is evaluated by a jury of photography faculty twice during the year.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

*fewer than 33 credits remaining in degree programme.

PHOT 470 Professional Internship (6 credits)

Prerequisite: Third-year standing* in the Major in Photography and written permission of the Department. A student wishing to work in an apprentice capacity with an established photographic artist, or who would like to pursue research in photographic criticism, museum work, publication, or other related endeavours may apply for academic credit. The internship will be carried out under the joint supervision of a qualified professional (from within or without the University) and a full-time Photography faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student. *fewer than 33 credits remaining in degree

PHOT 481 *Independent Study I* (3 credits) Prerequisite: Written permission of the Department. A course of independent study in which the student explores a specific area of photography.

programme.

PHOT 482 Independent Study II (3 credits)
Prerequisite: PHOT 481 and written permission
of the Department. A student repeating
PHOT 481 registers for credit under PHOT 482.

PHOT 498 Special Topics in Photography (3 credits)

Prerequisite: Written permission of the Department. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of photography.

PHOT 499 Special Topics in Photography (6 credits)

Prerequisite: Written permission of the Department. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of photography.

Print Media:

PRIN 211 Intaglio I (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An introductory studio course in intaglio techniques with an emphasis on creative imagery. Demonstrations will cover drypoint, mezzotint, engraving, power engraving tools, acid-resist materials, aquatint, acids, photo-plates and methods of printing. Lectures and critiques will focus on theoretical, historical, and aesthetic issues in contemporary print media.

NOTE: Students who have received credit for PRIN 210 may not take this course for credit.

PRIN 221 Lithography I (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An introductory studio course in the basic principles of hand-printed stone and plate lithography with an emphasis on image development. Demonstrations will cover drawing, washes, etching, registration and an introduction to colour and photo-plate lithography. Through assignments and critiques, students will investigate print media within the context of contemporary culture.

NOTE: Students who have received credit for PRIN 220 may not take this course for credit.

PRIN 231 Screenprinting I (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An introductory studio course in the basic techniques of screenprinting with an emphasis on creative imagery. Demonstrations and workshops will cover stencil techniques for water-based inks including direct emulsion, digital and hand-drawn transparencies, photo-generated transparencies, registration and colour printing.

NOTE: Students who have received credit for PRIN 230 may not take this course for credit.

PRIN 241 Relief I (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. A studio course where students will investigate the creative possibilities of relief printing in woodcut, linocut and collagraphs. Demonstrations, lectures, and workshops will cover cutting techniques, various plate materials, colour separation and multiple plates, registration, inks, colour proofing and printing methods. Students will focus on relief printing as a direct and facile process in studio practice.

NOTE: Students who have received credit for PRIN 240 may not take this course for credit.

PRIN 311 Intaglio II (3 credits)

Prerequisite: PRIN 211 or written permission of the Department. An intermediate-level studio course in intaglio with an emphasis on colour imagery. Demonstrations and lectures will cover colour separation, digital imaging, photo-generated images, etching, multiple plates, inks, registration, colour proofing, printing and editioning. Studio practice and critiques will focus on the development of expressive print imagery. NOTE: Students who have received credit for PRIN 210 may not take this course for credit.

PRIN 321 Lithography II (3 credits)
Prerequisite: PRIN 221 or written permission of the Department. An intermediate studio course where students will explore the diverse technical and conceptual approaches of colour imagery in lithography. Demonstrations will cover drawing and transfer methods, photo-digital imaging and photo-plate lithography, colour separation, registration and colour printing. All print media processes will be explored in the contexts of contemporary print media and the development of personal imagery.

NOTE: Students who have received credit for PRIN 220 may not take this course for credit.

PRIN 331 Screenprinting II (3 credits)
Prerequisite: PRIN 231 or written permission of
the Department. A studio course in the techniques
of water-based screenprinting at the intermediate
level. This course will provide the opportunity for
continued research in darkroom techniques,
digital imaging and colour printing, alternative
printing surfaces, diverse approaches to image
making and the combination of processes.
Students will be required to create a portfolio
that demonstrates their technical and conceptual
knowledge of contemporary print media.
NOTE: Students who have received credit for
PRIN 230 may not take this course for credit.

PRIN 361 *Monoprint* (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. A studio course where students investigate concepts of the unique print. Demonstrations will cover oiland water-based inks, various plate materials, and diverse methods of printing. A combination of techniques will be explored involving lithography, screen and intaglio processes. The definition of monoprint will be shaped by students' imagery and individual practice. NOTE: Students who have received credit for PRIN 460 may not take this course for credit.

PRIN 371 Contemporary Print Processes (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. This studio course will address specific topics in print processes and new technologies. Students will create a portfolio of artwork that demonstrates their research.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 381 Aspects of Print Media (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. A studio course that will explore specific problems in the

discourse of print media. Students will create a body of artwork that demonstrates critical thinking and research on the featured topic. NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 398 Special Topics in Print Media (3 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. A studio course that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 399 Special Topics in Print Media (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. A studio course that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic. NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 411 Intaglio III (3 credits)

Prerequisite: PRIN 311 (or PRIN 210 before September 1997) or written permission of the Department. An advanced studio course for students who want to refine their expertise in intaglio techniques through experimentation and innovation. This course provides the opportunity for further exploration in digital imaging, photogenerated imagery, multiple-plate colour imagery, alternative print surfaces, combined print processes and new technologies. Students will be required to develop a coherent portfolio that demonstrates their involvement in contemporary print media.

PRIN 421 Lithography III (3 credits) Prerequisite: PRIN 321 (or PRIN 220 before September 1997) or written permission of the Department. An advanced studio course that offers students the opportunity to refine their expertise in lithography while creating experimental and innovative artwork. Students will be encouraged to develop unique prints, combined print processes, sequential imagery, three-dimensional projects, installation, and cross-disciplinary work as alternative formats for the lithographic print. Demonstrations, lectures and critiques will focus on advanced techniques and diverse approaches to image making in lithography.

PRIN 431 Screenprinting III (3 credits)
Prerequisite: PRIN 331 (or PRIN 230 before
September 1997) or written permission of the
Department. An advanced studio course where

students will develop their expertise in screenprinting as a creative process for image making. Student projects will focus on experimental imagery, new technologies, combined techniques and diverse forms of printing. Group critiques and lectures will emphasize problem solving and critical analysis in the creation of personal imagery.

PRIN 451 Projects in Print Media I (3 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course where students propose and complete print projects in consultation with the instructor. This course is an opportunity for students to continue their aesthetic research with in-depth and focused print projects. Students will design projects according to their interests and established technical proficiency. The course will emphasize individual practice within the context of informed discussion, group and individual critiques, gallery and museum visits, and may include an exhibition.

NOTE: Students who want advanced technical information in a particular process should enrol in 300- or 400-level courses of intaglio, screenprinting or lithography.

PRIN 452 Projects in Print Media II (3 credits)

Prerequisite: PRIN 451 or written permission of the Department. A studio course that provides the opportunity for advanced research into personal imagery and a commitment to print processes. This course is a continuation PRIN 451.

PRIN 470 Independent Study in Print Media (6 credits)

Prerequisite: Enrolment in a BFA programme and written permission of the Department. A studio course of independent study for which the student proposes a research project. The scope of the project and schedule of work should be equivalent to the workload of a six-credit course. NOTE A/See §200.3

PRIN 471 Independent Study in Print Media I (3 credits)

Prerequisite: Enrolment in a BFA programme and written permission of the Department. A studio course of independent study in which the student proposes a research project. The scope of the project and schedule of work should be equivalent to the workload of a three-credit course.

PRIN 472 Independent Study in Print Media II (3 credits)

Prerequisite: PRIN 471 and written permission of the Department. A studio course of independent study in which the student proposes a research project. The scope of the project and schedule of work should be equivalent to the workload of a three-credit course.

PRIN 481 Professional Internship (3 credits)

Prerequisite: Written permission of the Department. Internships are for students who wish to obtain practical experience by working as an apprentice in a professional environment, or who would like to pursue research in the curating of prints, print criticism, or other related experience in print media, and receive academic credit for the activity. Approval of the project will be based on the demonstrable learning potential of the activity. Students are required to submit an internship proposal that clearly defines the objective of the activity, appropriate workload (equivalent to the hours required for a three-credit course), nature of participation, and supervisory schedules. The internship will be jointly supervised by a faculty member and a qualified professional. It is the student's responsibility to obtain approval for the proposal from a programme adviser, including any required contractual agreements, before the start of the internship.

PRIN 498 Special Topics in Print Media (3 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course for advanced students that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic. NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 499 Special Topics in Print Media (6 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course for advanced students that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic. NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

Sculpture:

SCUL 200 Sculpture I (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission of the Department. An investigation into the modes of expression in sculpture through a variety of contemporary and traditional materials and methods including casting, modelling, construction, and welding. NOTE A/See §200.3

SCUL 300 Sculpture II (6 credits)

Prerequisite: SCUL 200 or permission of the coordinator. Investigation into materials and methods emphasizing an individual form of study. The development of concepts and their application, imagination, and vocabulary is essential. NOTE A/See §200.3

SCUL 398 Special Topics in Sculpture (3 credits)

Prerequisite: Third-year standing*; written permission of the Department. A workshop/ seminar course providing an opportunity for the study of specialized aspects of sculpture. NOTE C/See §200.3

*fewer than 33 credits remaining in the degree programme.

SCUL 399 Special Topics in Sculpture (6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in sculpture. NOTE C/See §200.3

SCUL 400 Sculpture III (6 credits)
Prerequisite: SCUL 300 or permission of the coordinator. Advanced investigation into a single or group of concepts and materials through the development of a body of personal work.

NOTE A/See §200.3

SCUL 450 Independent Study (6 credits)
Prerequisite: Third-year standing*; SCUL 400,
previously or concurrently; and written permission
of the Department. This course provides the
opportunity for a limited number of students to
pursue advanced studies in sculpture.
NOTE A/See §200.3

*fewer than 33 credits remaining in degree programme.

SCUL 465 Contemporary Practice and Theory in Sculpture (6 credits)

Prerequisite: Enrolment in the Major in Sculpture, in Ceramics, or in Fibres; or written permission of the Department. A seminar course which looks at recent sculpture practice and theory from an artist's point of view. Readings and lectures will be complemented by visiting artists, visits to exhibitions, presentations, and other related activities.

SCUL 490 Advanced Studio Practice (6 credits)

Prerequisite: Enrolment in the Major in Sculpture, in Ceramics, or in Fibres; or written permission of the Department. A studio course providing an opportunity for the advanced student to work in an intimate context within a studio setting, structured around current topics of theoretical and practical importance.

Studio Fine Arts:

SFAR 250 Visual Language as Content (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission from a designated Studio Art adviser. A studio course focusing on visual language as content. Colour and its permutations, line, shape, pattern, texture, and composition are the personal vocabulary of each artist. The claiming of this language is central to an art

practice; it will be established through two- and three-dimensional projects which challenge students to explore their capacity to visually articulate their complexity as beings in nature and culture.

SFAR 260 Integrated Drawing: Intersections (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission from a designated Studio Art adviser. A studio course which embraces various attitudes towards drawing. As an alternative approach, students experience the medium from the different perspectives of various disciplines. The course will explore the possibilities of non-traditional materials and strategies for producing drawings. Analogue (narrative) and notation, as well as the notion of aesthetic and non-aesthetic uses of drawing (such as mapping, charting, making diagrams, documenting) will be investigated.

SFAR 270 Extended Studio Practices (6 credits)

Prerequisite: Enrolment in a BFA programme or written permission from a designated Studio Art adviser. A studio course which introduces the diversity of contemporary art practice and theory. Alternative venues, interactive art forms, questions of authorship, the significance of the object/artifact, and perceptions other than visual are among the subjects to be explored.

Video:

VDEO 300 Video Production (6 credits)

Prerequisite: Second-year standing*, and written permission of the Interdisciplinary Studies programme coordinator, or the Mel Hoppenheim School of Cinema. A studio course introducing video technology as a tool for aesthetic investigation and creation. Students work individually and collaboratively to develop a proficiency in the medium and to evolve their particular thematic and formal concerns. Concepts and issues specific to video are discussed through the analysis and demonstration of video art.

NOTE: Students are required to bear the cost of materials and processing.

*66 or fewer credits remaining in degree programme.

VDEO 350 Video History and Theory (6 credits)

A survey lecture course introducing the history and theory of art video practice since its inception in the 1960's. The course locates the roots of this art form in such divergent impulses as conceptualism, community activism, technological experimentation, and broadcast television, as well as in narrative and documentary traditions. In addition, regional Canadian video artists and cooperatives are situated within international historical trends and the development of postmodern and other theoretical perspectives. Weekly screenings.

Women and the Fine Arts:

WFAR 320 Women and the Fine Arts I

(6 credits)

An investigation of the visual and performing arts as they pertain to issues of gender. Studio practices in relation to theoretical and critical concerns are investigated. NOTE A/See §200.3 NOTE: Students who have received credit for FFAR 320 may not take this course for credit.

WFAR 420 Women and the Fine Arts II

(6 credits)

Prerequisite: WFAR 320 or written permission of the coordinator. A continuation of WFAR 320. NOTE: Students who have received credit for FFAR 420 may not take this course for credit.

81.120

THEATRE

Faculty

ERIC MONGERSON, Associate Professor

Professors GERALD GROSS PHILIP SPENSLEY

Associate Professors **RALPH ALLISON** KIT BRENNAN

GENE GIBBONS NANCY HELMS **EDWARD LITTLE**

Assistant Professors KAIRIIN BRIGHT ANA CAPPELLUTO

Adjunct Professor BARBARA MACKAY

Location

Loyola Campus TJ Building, Room: 102 (514) 848-4747

Department **Objectives**

The Theatre Department offers students an opportunity to explore theatre as an art form and instrument for social change.

The programme provides students with a basic grounding in design, playwriting, management and performance, and serves as preparation for advanced studies. It also allows individuals who wish to focus on drama within the context of human development to study educational, rehabilitative, and therapeutic aspects of theatre.

The Department welcomes autonomy and personal creativity in its students while encouraging initiative and collaboration. Reflecting the realities of modern theatre, it prepares students for selfemployment and entrepreneurial roles within the Canadian theatre milieu.

Programmes

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20. The superscript indicates credit value.

BFA Major in Theatre 48

- Core studies: DFHD 2093; DFTT 2093, 210³; THEA 211³, 303³, 312³, 404³; PROD 2113; TPER 2093, 2103
- Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)

BFA Specialization in Design for the Theatre

- Core studies: DFHD 2093; DFTT 2093, 30 2103; THEA 2113, 3033, 3123, 4043; PROD 2113; TPER 2093, 2103
- Chosen from DFTT 3113, 3213, 3313, 4983
- Chosen from DFTT 315³, 325³, 326³, 335³, 336³, 337³, 398³
- 3 THEA 4113
- Elective credits from the Faculty of Fine

*Students are advised to select six credits from SFAR 250°, 260°, 270°.

BFA Specialization in Drama for **Human Development**

- Core studies: DFHD 2093; DFTT 2093, 210³; THEA 211³, 303³, 312³, 404³; PROD 211³; TPER 209³, 210³ DFHD 210³, 302³, 303³, 311³, 312³, 421³,

431³, 432³, 498³

12 Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)

BFA Specialization in Theatre 60 Performance

- Core studies: DFHD 209³; DFTT 209³, 210³; THEA 211³, 303³, 312³, 404³; PROD 2113; TPER 2093, 2103
- Chosen from TPER 3113, 3123, 3133, 323³, 345³, 355³, 398³
- Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)

BFA Major in Playwriting

- Core studies: DFHD 209³; DFTT 209³, 2103; THEA 2113, 3033, 3123, 4043; PROD 211³; TPER 209³, 210³ THEA 241³, 341³, 342³, 420⁶ THEA 411³
- 15

24 Minor in Theatre

- Chosen from THEA 3033, 3123, 4043 6
- Chosen from PROD 2113; THEA 2113; 6 TPER 2013
- 12 Elective credits from the Department of Theatre

81.120.1 Admission to Programmes in Theatre The Department of Theatre has distinct admissions procedures in addition to the normal admission process of Concordia University. All applicants are required to sit for an *interview* and submit a *letter of intent* (approximately 500 words) in which they name specifically to which programme they wish to apply: the Major in Theatre, the Minor in Theatre, the Specialization in Drama for Human Development, the Specialization in Design for the Theatre, the Major in Playwriting or the Specialization in Theatre Performance.

Applicants must contact the Department of Theatre in February to arrange their appointments and to obtain detailed information regarding interviews, *auditions*, *portfolios*, and letters of intent. In addition to the interview and letter of intent:

- Applicants applying to the Specialization in Design for the Theatre must bring to the interview a
 portfolio including visual material demonstrating their creative abilities and interests.
- Applicants applying to the Specialization in Drama for Human Development are required to audition.
- 3. Applicants applying to the Specialization in Theatre Performance are required to audition.
- Applicants applying to the Major in Playwriting must send in a portfolio of writing for the stage before their scheduled interview.
- Applicants applying to the Major in Theatre may choose to audition or to submit a portfolio of materials demonstrating their creative abilities and interests.
- 6. Applicants applying to the Minor in Theatre are required to attend an interview.

Courses

Theatre:

THEA 211 Script Analysis (3 credits)

Prerequisite: Enrolment in a programme of the Department of Theatre or written permission of the Department. A study of systematic approaches commonly used for the analysis of dramatic scripts. Students will practice analytical skills on a representative selection of plays, including, when appropriate, those slated for production by the Department.

NOTE: Students who have received credit for THEA 240 may not take this course for credit.

THEA 241 Elements of Playwriting (3 credits)

Prerequisite: Enrolment in a programme of the Department of Theatre or written permission of the Department. Study of and practice in creating the elements of a play. Students will explore different aspects of the writing process, and are expected to submit work of their own on a regular basis for discussion and workshopping within the group.

THEA 303 Theatre History I (3 credits) A study of the development of the physical stage and representative theoretical and dramatic works within their social context from pre-history to the eighteenth century in Europe. Where appropriate, screenings of plays representing the periods under study are shown. NOTE A/See §200.3

THEA 312 Current Canadian Theatre (3 credits)

A survey of Canadian theatre in the present day, incorporating a study of notable works, outstanding artists and other figures in the arts world and arts organizations. The course will include an analysis of conditions prevailing on the theatre in various regions of the country and will invite students to take stock of their own future in the theatre or elsewhere.

NOTE: Students who have received credit for THEA 403 may not take this course for credit.

THEA 317 Stage Management (3 credits)
Prerequisite: DFHD 209; DFTT 210; PROD 211;
THEA 211; TPER 210; or written permission of
the Department of Theatre. The key role of a
stage manager in theatrical production from
audition through closing. Topics for consideration
include organizational techniques, prompt-book
construction and use, scheduling, personnel
supervision, and the "running" of a show.

THEA 321 Theatre Administration I (3 credits)

An introduction to theatre administration including theatre organization and management, budgeting, box office operation, publicity, and public relations. NOTE A/See §200.3

THEA 341 Playwriting I (3 credits) Prerequisite: THEA 241, or enrolment in a programme of the Department of Theatre, or written permission of the Department. A seminar in the writing of plays. Students will concentrate upon a particular genre, length of play, or other prearranged topic, and will submit original scripts for discussion, workshopping, and possible presentation.

THEA 342 Playwriting II (3 credits)
Prerequisite: THEA 241, or enrolment in a
programme of the Department of Theatre, or
written permission of the Department. A seminar
in the writing of plays. Students will concentrate
upon a particular genre, length of play, or other
prearranged topic, and will submit original scripts
for discussion, workshopping, and possible
presentation. The prearranged topic or genre
will be different from that offered in Playwriting I
in any one year.

THEA 403 The Theatre in Context (3 credits)

Prerequisite: Third-year standing* and written permission of the Department of Theatre. An examination of the role of individual artists in shaping the theatre in contemporary society.

The functions and characteristics of the theatre, in a variety of cultural contexts, are examined in discussions and readings. Emphasis is placed on the Canadian theatre and its potential. *fewer than 66 credits remaining in degree programme.

THEA 404 Theatre History II (3 credits)
Prerequisite: THEA 303 or written permission of
the Department of Theatre. A study of the development of the physical stage and representative
theoretical and dramatic works within their social
context in Europe, the United States, and Canada
from the nineteenth century to recent years.
Where appropriate, screenings of plays representing the periods and types of works under
study are shown.

NOTE: Students who have received credit for THEA 304 may not take this course for credit.

THEA 405 Independent Study I (3 credits)
Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects supervised by a faculty member. Students are required to submit a paper based on their investigation.

NOTE C/See §200.3

THEA 411 Directing (3 credits)
Prerequisite: Completion of 24 credits of the
Core, including DFTT 210 and TPER 210 or
written permission of the Department of Theatre.
Examination of and experimentation in staging
and production organization. Exercises in visual,
structural, and conceptual analysis.

NOTE A/See §200.3

THEA 415 Independent Study II (3 credits)
Prerequisite: THEA 405 and written permission
of the Department of Theatre. A continuation of
THEA 405. Students who have taken THEA 405
register for THEA 415 for additional credits.

THEA 420 Playwriting Workshop (6 credits)

Prerequisite: Third-year standing* and at least one of THEA 241, 341 or 342 and written permission of the coordinator of the Major in Playwriting; or enrolment in the Major in Playwriting and THEA 241, 341 and 342. A workshop for playwrights, actors, directors, and scenographers in which original scripts are written and workshopped for possible future production. An outcome of an appropriate dimension is a feature of this course. *fewer than 33 credits remaining to be completed in degree programme.

THEA 422 Theatre Administration II (3 credits)

Prerequisite: THEA 321 or written permission of the Department of Theatre. A continuation of THEA 321 with additional topics introduced such as financing, contracting, taxation, and touring. NOTE A/See §200.3

NOTE: Students who have received credit for THEA 322 may not take this course for credit.

THEA 498 Topics in Theatre Studies (3 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres. NOTE C/See §200.3

Design for the Theatre:

DFTT 209 Introduction to Design for the Theatre I (3 credits)

Prerequisite: Permission of the Department of Theatre. An examination of the theatrical design process, including the role of designers in the theatre. Students study and practice the conception, communication, and realization of design ideas in lectures and lab.

NOTE: Students who have received credit for DFTT 250 may not take this course for credit.

DFTT 210 Introduction to Design for the Theatre II (3 credits)

Prerequisite: DFTT 209. A continuation of DFTT 209.

NOTE: Students who have received credit for DFTT 250 may not take this course for credit.

DFTT 305 *Independent Study* (3 credits) Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects in Design for the Theatre supervised by a faculty member.

DFTT 311 *Lighting Design* (3 credits)
Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Lighting design for the theatre with emphasis on conception, development, and communication of lighting design ideas. Students participating in lectures and studios examine theories, aesthetics, and conventions of stage lighting design. They also carry out projects in lighting design conception.

DFTT 315 Lighting Design Realization (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Lighting for the stage with emphasis on analysis, development, and execution of lighting design ideas. Students participating in lectures and studios examine lighting as a practical expressive and interpretative media. They carry out projects using stage lighting equipment in an actual theatre space. *NOTE A/See §200.3*

DFTT 321 *Costume Design* (3 credits)
Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Costume design for the theatre with emphasis on imaginative and analytical processes of developing and communicating costuming design ideas. Students, participating in lectures, studios and projects, examine theories, aesthetics, and conventions of stage costume design.

DFTT 325 Costume Design Realization (3 credits)

Prerequisite: DFTT 209 and 210 or written per-

mission of the Department of Theatre. Materials, equipment, techniques, and procedures utilized in the construction of theatre costumes. Emphasis is on patterning, draping, and basic construction methods.

DFTT 326 Costume Accessories Realization (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Costuming for the stage with emphasis on analysis, development, and execution of costume design ideas. Students, participating in lectures and studios, examine materials, equipment, and procedures utilized in the realization of costume accessories. They carry out projects in buckram and frame construction for hats, mask-making, and accessory construction. *NOTE A/See* §200.3

DFTT 331 Set Design (3 credits)
Prerequisite: DFTT 209 and 210 or written
permission of the Department of Theatre. Set
design for the theatre with emphasis on conception, development, and communication of scenic
design ideas. Students, participating in lectures
and studios, examine theories, aesthetics, and
conventions of set design. They also carry out
projects in set conception.

DFTT 335 Set Design Realization (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Stage scenery with emphasis on analysis, development, and execution of scenic design ideas. Students, participating in lectures and studios, examine the process of translating scenic designs into actual stage systems. They carry out projects using the equipment and material commonly used in set construction.

DFTT 336 Stage Properties (3 credits) Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Studio work in the design and construction of properties and accessories for theatre production.

DFTT 337 Scene Painting (3 credits) Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Studio work in the materials and technology of painting for the theatre. *NOTE A/See* §200.3

DFTT 398 Special Topics in Design for the Theatre (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Selected topics in design realization. NOTE C/See §200.3

DFTT 414 Advanced Projects in Design for the Theatre (3 credits)

Prerequisite: Third-year standing* in the Specialization in Design for the Theatre and written permission of the Theatre. Students complete major assignments in design or

realization for the Department of Theatre productions. NOTE A/See §200.3 *fewer than 33 credits remaining in degree programme.

DFTT 451 Designers in the Theatre I (3 credits)

Prerequisite: Third-year standing* in the Specialization in Design for the Theatre or written permission of the Department of Theatre. An advanced study of the role of designers in the contemporary theatre. Students participate in discussions concerning the theories, aesthetics, conventions, and standards of the Canadian theatrical design community. Research is carried out with, and about important figures in the Canadian theatre. Students also assemble a body of their design work indicative of their imagination, experiences, and understandings of the theatre. NOTE A/See §200.3

*fewer than 33 credits remaining in degree programme.

DFTT 452 Designers in the Theatre II (3 credits)

Prerequisite: DFTT 451. A continuation for DFTT 451. NOTE A/See §200.3

DFTT 498 Special Topics in Design for the Theatre (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Selected topics in theatre design. NOTE C/See §200.3

Drama for Human Development:

DFHD 209 Drama for Human Development: Personal (3 credits)

Prerequisite: Enrolment in a programme of the Department of Theatre or written permission of the Department. Theory and practice of drama for human development, with an emphasis on personal or individual development. Opportunities are provided for practical work in the creation of original narratives and improvised role plays, as well as sensory and image work. The dynamics and creative processes characteristic of human growth are examined, as are developmental models.

NOTE: Students who have received credit for DINE 200 may not take this course for credit.

DFHD 210 Drama for Human Development: Social (3 credits)

Prerequisite: DFHD 209. An exploration of drama for human development within group or social environments, such as schools and other institutional settings. Learning theories will be examined as they pertain to human development, and opportunities centred on themes such as myth or poetry will be provided for practical work in group collaborative processes and the exploration of social issues through drama. NOTE: Students who have received credit for DINE 200 may not take this course for credit.

DFHD 302 Drama for Special Populations (3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. Design and preparation of appropriate drama or theatre activities for individuals with special needs in schools or community and institutional settings. Topics include specialized teaching strategies, activity planning, special needs assessment, classroom or workshop management and self-evaluation. NOTE: Students who have received credit for DINE 302 may not take this course for credit.

DFHD 303 Stories and Storytelling (3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. This course focuses on the development of the participants' skills in reading and telling stories, on the creation and evaluation of new stories, on methods of using literature as a basis for dramatic play.

NOTE: Students who have received credit for DINE 303 may not take this course for credit.

DFHD 311 Popular Theatre: Theory and Practice (3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. An examination of the principles on which popular theatre is based, including objectives, approaches, and evaluation. The course will provide an overview of the work of various founders (e.g. Freire, Boal), as well as pertinent theatre companies around the world engaged in social activism and the creation of opportunities for social change. Topics are approached through a mix of academic studies and the practice of specific techniques. Students may also prepare a work of popular theatre. NOTE: Students who have received credit for this topic under a DINE 498 number may not take this course for credit.

DFHD 312 Theatre for Young Audiences (3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. An overview of theatre for young audiences, from both national and international perspectives. Projects may include reading representative scripts, exploring various performance styles and staging techniques, and preparing a short piece of theatre for young audiences in a particular genre.

NOTE: Students who have received credit for DINE 412 or 413 may not take this course for credit.

DFHD 405 *Independent Study I* (3 credits) Prerequisite: Third-year standing* and written permission of the Department of Theatre. Credit granted for independent projects in Drama for Human Development supervised by a faculty member.

*fewer than 33 credits remaining in degree programme.

NOTE: Students who have received credit for DINE 405 may not take this course for credit.

DFHD 415 *Independent Study II* (3 credits) Prerequisite: Third-year standing* and written permission of the Department of Theatre. A continuation of DFHD 405. Students who have taken DFHD 405 register for DFHD 415 for additional credits.

*fewer than 33 credits remaining in degree programme.

NOTE: Students who have received credit for DINE 415 may not take this course for credit.

DFHD 421 An Introduction to Drama Therapy (3 credits)

Prerequisite: DFHD 302 or written permission of the Department of Theatre. An introduction to the theory and practice of drama therapy, including grounding in psychology pertinent to the field. Lectures and workshops in which students examine the philosophical and historical foundations of drama and theatre in therapy. NOTE: Students who have received credit for DINE 420 may not take this course for credit.

DFHD 431 Special Projects in Drama for Human Development I (3 credits)

Prerequisite: Enrolment in Drama for Human Development Specialization and DFHD 302, or written permission of the coordinator of Drama for Human Development. An lecture/lab in observing, evaluating, planning and implementing drama curricula in various locations such as inner-city schools, prisons, homes for the elderly, and women's shelters. Students shall engage in wide-ranging and intensive fieldwork in various placements, reporting back to classmates and receiving lectures, feedback and observations on their progress from the instructor of the course.

DFHD 432 Special Projects in Drama for Human Development II

(3 credits)

Prerequisite: DFHD 431. Continuation of DFHD 431 with a different topic.

DFHD 498 Special Topics in Drama for Human Development (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of Drama for Human Development.

Drama in Education:

DINE 401 Supervised Internship — Elementary Level (3 credits)

Prerequisite: Written permission of the Department of Theatre. Students teach a curriculum unit which uses drama methods in an elementary setting. Students are supervised and their teaching performance is evaluated on selected criteria related to teaching competence and professional behaviour.

DINE 402 Supervised Internship — Secondary Level (3 credits)

Prerequisite: Written permission of the Depart-

ment of Theatre. Students teach a curriculum unit in creative drama or theatre arts at the secondary level. Students are supervised and their teaching performance is evaluated on selected criteria related to teaching competence and professional behaviour.

DINE 412 Introduction to Theatre for Young Audiences (3 credits)

Prerequisite: DINE 200 or written permission of the Department of Theatre. The history of theatre for young audiences in the twentieth century, including readings of representative scripts, a study of various performance styles, and an examination of the relationship of style and content to changing cultural views of children. NOTE A/See §200.3

DINE 413 Theatre for Young Audiences: Production (3 credits)

Prerequisite: Enrolment in the Specialization in Drama in Education or audition and written permission of the Department of Theatre. Research and practical work in the collaborative process of developing theatre for young audiences. NOTE A/See §200.3

Production:

NOTE: Conditions of access to courses and scheduling:

- 1. All assignments or roles are given after interview or audition.
- 2. Before registering for Production courses, students must make sure they are free to attend all rehearsals or crew calls according to the schedules published each session by the Department of Theatre.
- 3. Students may not register for more than one course in Production during the same semester.

PROD 211 Introduction to Theatre Production (3 credits)

Prerequisite: Enrolment in a programme of the Department of Theatre or permission of the Department. A survey of selected operations central to production in the professional theatre. Students are assigned to various crews associated with departmental productions. NOTE: Students who have received credit for THEA 240 may not take this course for credit.

PROD 311 Theatre Production I (3 credits)
Prerequisite: DFHD 209; DFTT 209, 210;
FFAR 250; THEA 211; TPER 209, 210;
PROD 211; concurrent registration in six credits of courses outside the Faculty of Fine Arts, and written permission of the Department of Theatre. Participation in a theatre production prepared under the auspices of the Department of Theatre and presented to an audience. The systematic preparation for the presentation of the work requires the integration of scholarly, imaginative and organizational activities under the supervision of instructors and staff acting either as part of the creative team or as guides and members of an adjudicating panel.

PROD 312 Theatre Production II (3 credits)
Prerequisite: PROD 311 and written permission
of the Department of Theatre. A continuation of
PROD 311 in an intensive format, requiring
extensive work of a different type or level of
complexity, or demanding a higher degree of
proficiency.

PROD 315 Production A (6 credits)

Prerequisite: PROD 311 and written permission of the Department of Theatre. A continuation of PROD 311 in an intensive format, requiring extensive work of a different type or level of complexity, or demanding a higher degree of proficiency.

PROD 408 Supervised Internship I

(3 credits)

Prerequisite: Second-year standing* and written permission of the Department of Theatre. An opportunity for students to obtain credit for work completed for a recognized theatre under the joint supervision of a qualified professional and a full-time Theatre faculty member.

NOTE C/See §200.3

*fewer than 66 credits remaining in degree programme.

PROD 409 Supervised Internship II (3 credits)

Prerequisite: PROD 408 and written permission of the Department of Theatre. A continuation of PROD 408. A student repeating PROD 408 register for PROD 409 for credit.

PROD 411 Theatre Production III (3 credits)

Prerequisite: PROD 311 or 315; FFAR 250; six credits in courses outside the Faculty of Fine Arts and concurrent registration in another six in courses outside the Faculty and written permission of the Department of Theatre. Advanced assignments in the various areas of theatre.

PROD 412 Theatre Production IV (3 credits)

Prerequisite: PROD 411 and written permission of the Department of Theatre. A continuation of PROD 411, with assignments of a different type, degree of complexity, or demanding a higher degree of proficiency.

PROD 413 Theatre Production V (3 credits)

Prerequisite: PROD 412 or written permission of the Department of Theatre. Students in a Mature level or an Extended Credit Programme repeating PROD 412 register for credit under PROD 413.

PROD 414 Theatre Production VI (3 credits)

Prerequisite: PROD 413 or written permission of the Department of Theatre. Students in a Mature level or an Extended Credit Programme repeating PROD 413 register for credit under PROD 414. PROD 415 Production B (6 credits)
Prerequisite: PROD 312 or 315 or 411, six
credits in courses outside the Faculty of Fine
Arts and concurrent registration in another six
credits in courses outside the Faculty and
written permission of the Department of Theatre.
Extensive assignments, requiring intensive work
in various areas of advanced theatre work.

PROD 416 Production C (6 credits)
Prerequisite: Third-year standing, PROD 416,
six credits in courses outside the Faculty of Fine
Arts and concurrent registration in another six
credits in courses outside the Faculty and
written permission of the Department of Theatre.
Extensive assignments, requiring intensive work
in various areas of advanced theatre work.

Theatre Performance:

TPER 201 Introduction to Acting (3 credits)

Emphasis on developing imagination and physical expression, including basics of improvisation, the playing of intention, and the group ensemble experience working towards presentation.

NOTE: Students enrolled in a Major or Specialization programme in the Department of Theatre may not take this course for credit.

TPER 209 Acting I (3 credits)

Prerequisite: Enrolment in a programme of the Department of Theatre or written permission of the Department of Theatre. An introduction to the basic principles of the acting process. Areas of study include: sensory awareness, physical and vocal expression of image and intention, improvisation exercises focusing on the development of the actor's imagination, concentration, and ensemble playing. The emphasis is upon the process of making connections to images and listening to others in the theatrical space.

TPER 210 Acting II (3 credits)

costs in relation to this course.

Prerequisite: TPER 209. A continuation of TPER 209 with increased emphasis on language and text. The principles learned in the previous course will be applied to dramatic text including text analysis for the actor.

TPER 216 Voice Studio II (3 credits)
Prerequisite: TPER 215 and TPER 210
concurrently (or 212 before September 1998). A
continuation of TPER 215.
NOTE: Students are expected to bear certain

TPER 301 Voice, Movement and Acting IIa (3 credits)

Prerequisite: TPER 200. Students read, analyse text, and begin exploring characterization. Exercises in movement and text encourage development of the voice and body. Regular études are presented and critiqued. NOTE: Students who have completed 12 or more credits of Theatre Performance courses

may not take this course for credit. NOTE: Students who have received credit for TPER 300 may not take this course for credit.

TPER 302 Voice, Movement and Acting IIb (3 credits)

Prerequisite: TPER 301. A continuation of TPER 301.

NOTE: Students who have received credit for TPER 300 may not take this course for credit.

TPER 311 Character and Text (3 credits)
Prerequisite: TPER 210 (or 212 before
September 1998) and written permission of
the Department of Theatre. Principles of
characterization in various dramatic genre:
elements of rhythm, physical and vocal attitude,
language, and related improvisation techniques.

TPER 312 Acting Elizabethan Text (3 credits)

Prerequisite: TPER 210 (or 212 before September 1998) and written permission of the Department of Theatre. Analysis of Elizabethan text and application of acting principles to the demands of verse forms.

TPER 313 Theatre Movement I (3 credits) Prerequisite: TPER 210 (or 212 before September 1998). Movement for the stage including such areas of study as centering, relaxation, mime, neutral mask, and studies in

rhythm and timing.

NOTE: Students who have received credit for TPER 213 may not take this course for credit.

TPER 315 Voice Studio III (3 credits)
Prerequisite: TPER 216, TPER 311 concurrently, and written permission of the Department of Theatre. A continuation of TPER 216 with greater emphasis on shaping patterns of speech, use of language for character development, and an introduction of dialects and accents. Private tutorial dealing with specific elements of speech and voice for the performer is included.

NOTE: Students are expected to bear certain costs for this course.

TPER 316 Voice Studio IV (3 credits)
Prerequisite: TPER 315, TPER 312 concurrently.
A continuation of TPER 315.
NOTE: Students are expected to bear certain costs for this course.

TPER 323 Theatre Movement II (3 credits)
Prerequisite: TPER 313 and written permission
of the Department of Theatre. Approaching
character through the use of mask. The study of
movement and voice aspects of character are
approached through the use of half-masks.
Improvisation skills are further developed.

TPER 325 Acting Styles (3 credits)
Prerequisite: TPER 210 (or 212 before
September 1998) and written permission of the
Department of Theatre. This course focuses on

acting styles as they relate to audience-performer relationships in dramatic genre and periods. NOTE: Students who have received credit for TPER 411 may not take this course for credit.

TPER 333 Special Performance Studies I (3 credits)

Prerequisite: TPER 210 (or 212 before September 1998) and written permission of the Department of Theatre. The study of special performance techniques such as musical theatre, clown, Commedia dell'Arte, and mime. NOTE: Students who have received credit for TPER 413 may not take this course for credit.

TPER 345 Voice and Speech I (3 credits)
Prerequisite: TPER 210 (or 212 before
September 1998) and written permission of the
Department of Theatre. An introduction to voice,
speech, and singing skills. Vocal production,
articulation, phrasing, and language analysis are
taught in studio and laboratory sessions.

NOTE: Students who have received credit for
TPER 215 may not take this course for credit.

TPER 355 Voice and Speech II (3 credits)
Prerequisite: TPER 345 and written permission
of the Department of Theatre. A continuation of
TPER 345 with greater emphasis on shaping
patterns of speech, use of language for
character development.

NOTE: Students who have received credit for TPER 315 may not take this course for credit.

TPER 398 Special Topics in Theatre Performance (3 credits)

Prerequisite: Written permission of the Department of Theatre. Provides opportunities for studies in selected styles or modes of theatre performance. NOTE C/See §200.3

TPER 401 Voice, Movement and Acting Illa (3 credits)

Prerequisite: TPER 302 and written permission of the Department of Theatre. Students explore realistic and/or classical styles in acting. Projects may be drawn from historical and contemporary sources. Regular études are presented and critiqued.

NOTE: Students who have received credit for TPER 400 may not take this course for credit.

TPER 402 Voice, Movement and Acting IIIb (3 credits)

Prerequisite: TPER 401 and written permission of the Department of Theatre. A continuation of TPER 401.

NOTE: Students who have received credit for TPER 400 may not take this course for credit.

TPER 411 Ensemble V (3 credits) Prerequisite: TPER 312, 323, or written permission of the Department of Theatre. A continuation of TPER 312. Focuses on acting styles as they relate to audience-performer relationships in dramatic genre and periods.

TPER 412 Ensemble VI (3 credits) Prerequisite: TPER 411 or written permission of the Department of Theatre. A continuation of TPER 411.

TPER 413 Advanced Performance Studies I (3 credits)

Prerequisite: TPER 323 or written permission of the Department of Theatre. The study of special performance techniques such as musical theatre, clown, *Commedia dell'Arte*, and mime. NOTE A/See §200.3

NOTE: Students are expected to bear certain costs in relation to this course.

TPER 414 Advanced Performance Studies II (3 credits)

Prerequisite: TPER 316 or written permission of the Department of Theatre. The study of advanced voice and speech techniques. NOTE: Students are expected to bear certain costs in relation to this course.

TPER 417 Audition and Résumé Preparation (3 credits)

Prerequisite: Third-year standing* in the Specialization in Theatre Performance or in a Department of Theatre programme and written permission of the Department of Theatre. Techniques for auditioning, preparation of résumé, and the business aspects of the performer's work in the professional theatre. *fewer than 33 credits remaining in degree programme.

FACULTY

100 FACULTY

ABOU-ZEID, El Sayed, BSc Alexandria, BSc

Faculty Full-Time

Military Tech. Coll., Cairo, MSc PhD Alexandria, Decision Sciences and Management Information Systems ABDENNADHER, Akram, DipEng E.C. Paris, MSc PhD Penn. State, Computer Science ABDI, Ali, BA MA C'dia, PhD McG., Education ABRAMI, Philip, BA Bard Coll., MA PhD Manit., Education ACHESON, Palmer, BA Lond., MBA U.Q.A.M., MS PhD Indiana, TESL (Applied Linguistics) ACLAND, C. Derek, BComm MBA Qu., PhD N. Carolina, CA, Accountancy ACLAND, Charles Reid, BComm Car., PhD Illinois, Communication Studies ACLAND, Joan, BA Car., MA PhD C'dia, Art History ADAMS, Liselyn, BMus Boston, Cert Royal Conserv., The Hague, Music AGARWAL, Anjali, BE Delhi, MSc Calg., PhD C'dia, Electrical and Computer Engineering AHMAD, Arshad, BComm C'dia, MBA McG., Finance AHMAD, Jaleel, BA Alig., MS Pitt., PhD M.I.T., **Economics** AHMAD, M. Omair, BEng Sir G. Wms., BSc Alld., DEng C'dia, Electrical and Computer Engineering AHMED, A.K. Waizuddin, BEng PhD C'dia, Mechanical Engineering AHSAN, Syed M., BA Dacca, MA Essex, PhD McM., Economics AIKEN, S. Robert, BA Belf., MA McM., PhD Penn. State, Geography AKBARY, Amir, BSc MSc Tehran, PhD Tor., Mathematics and Statistics AL-HUSSEIN, Mohamed, BSc MSc U. Arch. Civ. Eng., MASc PhD C'dia, Building, Civil and Environmental Engineering AL-KHALILI, Asim J., MSc PhD Strath., Electrical and Computer Engineering ALAGAR, Vangalur S., BA MSc Madr., MA N.Y. State, PhD McG., Computer Science ALBERT, Paul J., BSc PhD New Br., Biology ALI, Syed Twareque, BSc MSc Dacca, MS PhD Roch., Mathematics and Statistics ALKASS, Sabah T., BSc U. of Tech., MSc PhD Lough., Building, Civil and Environmental Engineering ALLEN, Robert, MFA MA Cornell, English ALLISON, R.R., BA MA Calif., PhD Flor. State, Theatre ALLOR, Martin, BA Oakland, PhD Illinois, Communication Studies

ALVI, Shafiq A., BA MA Karachi, PhD Colo.,

Economics

AMANTEA, Gisèle, BFA Calg., MFA Puget Sound (Wash.), Studio Arts AMIOUNY, Samir, BEng Amer. of Beirut, MSc PhD Ga. Inst. of Tech., Mechanical Engineering AMIR, Shimon, BA MA Tel Aviv, PhD McG., Psychology AMIT, Zalman, BA PhD McG., Psychology AMIT-TALAI, Vered, BA McG., MA Tor., PhD Manc., Sociology and Anthropology ANASTASIU, Stefan, MFA Fine Arts Acad. Bucarest, Cinema ANASTASOPOULOS, Anastas, BA Athens, MA PhD Roch., Economics ANDERSON, Jacqueline M., MA Dund., MSc Alta., PhD Madison, Wis., Geography ANDRES, David H., BA MA Texas, PhD Wat., Psychology ANG, James, BS Philippines, MS PhD Purdue, Visiting Scholar in Finance ANVARI, Mohsen, BEng McM., MBA C'dia, MA PhD Case Western Res., Finance APPELBAUM, Steven H., BS Temple, MA St. Jos., PhD Ott., Management APRIL, Raymonde, BA Laval, Studio Arts ARBUCKLE-MAAG, Tannis Y., BA Manit., PhD Tor., Psychology ARGHEYD, Kamal, Higher Nat'l. DME Enfield Coll. of Tech., MBA Iran C.M.S., DBA Harv., Management ARNOPOULOS, Sheila, BA McG., MA C'dia, Journalism ASHTAKALA, Bala, BE Madr., ME Roor., PhD Wat., Building, Civil and Environmental Engineering ATHIENITIS, Andreas K., BSc N.B., PhD Wat., PEng Alta., Building, Civil and Environmental Engineering ATWOOD, J. William, BEng McG., MASc Tor., PhD Illinois, Computer Science AUDET, Josée, BA Laval, MBA McG., Management AUSTIN, Kevin, BMus MMA McG., Music AVOLONTO, Aimé, BA MA Benin, PhD U.Q.A.M., Études françaises BABA, Vishwanath V., BEng Madr., MBA W. III., PhD Br. Col., Management BAILEY, Shawn, BFA Calg., MFA York, Studio Arts BALFOUR, Barbara, Studio Arts BANDIA, Paul, LèsL Paris, MA PhD Montr., Études françaises BARAKETT, Joyce, BA Sir G. Wms., MA McG., PhD Montr., Education BARAN, Boris, BSc McG., MSc Wayne State, Decision Sciences and Management

Information Systems

ALY, Ibrahim M., BComm MS Egypt, MBA PhD

N. Texas State, Accountancy

BARBIERI, Bryan S., BA Montr., MBA Col., BCL LLB McG., Marketing

BARIBEAU, Jacinthe, BA MPs MA PhD Ott., Psychology

BARLOW, I. Max, BA Wales, MA Cinc., PhD McG., Geography

BARON, Lois J., BA McG., MA Mich. State, PhD Tor., Education

BAUER, Jan Heini, BA Sir G. Wms., MA PhD Manit., Psychology

BAXTER, Bonnie, Studio Arts

BAYNE, Clarence S., BA MA Br. Col., PhD McG., Decision Sciences and Management Information Systems

BÉDARD, Claude, BScA Laval, MSc PhD Imperial Coll., U.K., Building, Civil and Environmental Engineering

BÉLANGER, Anouk, BSc MSc Montr., Sociology and Anthropology

BELISLE, Jean, BA MA Montr., PhD Paris, Art History

BELL, Geoffrey, BComm MBA Manit., Management

BELZIL, Christian, BSc Msc Montr., PhD Cornell, Economics

BENNETT, Alexandra, BA Qu., MA W. Ont., PhD Brandeis, English

BERGIER, Michel J., MBA PhD SUNY (Buffalo), Marketing

BERGLER, Sabine, Vordiplom Stuttgart, MS
Mass., PhD Brandeis, Computer
Science

BERNARD, Robert M., BS MS Tenn., PhD Wash., Education

BERNIER, Normand, BA Laval, BSc Montr., MA C'dia, Management

BERNIER, Paul, BA MA Laval, PhD Montr., Philosophy

BERTRAND, Charles L., BA Western Wash., MA Ore., PhD Wis., History

BÉRUBÉ, Nicole, BSc Maine, MBA C'dia, Management

BETTON, Sandra, BComm McM., MSc PhD Br. Col., Finance

BHABRA, Harjeet, BS Kharagpur, DSM Jamnalal Bajaj Inst., MBA I.I.Mana., PhD Missouri-Columbia, Finance

BHAT, Rama B., BEng Mys., MTech PhD I.I.T., Mechanical Engineering

BIFFI, Joanne, BFA C'dia, MFA Paris, Studio Arts BILODEAU, Yves, BA MA U.Q.A.M., Studio Arts BIRD, Frederick B., BA BD Harv., PhD G.T.U. (Berkeley), Religion

BIRD, Peter H., BSc PhD Sheff., Chemistry and Biochemistry

BIRON, Pascale, BSc MSc PhD Montr., Geography

BISSON, Diane, BA MA Montr., Design Art BLAIR, Lorrie, BFA MA Ohio, PhD Ohio State, Art Education

BLAND, Leslie, BFA *Alta.*, MFA *Vic.*, *Theatre* BODE, Frederick A., BA *U.C.L.A.*, MA PhD *Yale. History*

BOIVIN, Caroline, BA Sher., MA Ott., Economics BOLTON, M. Catherine, BA Car., MA Qu., PhD McM., Classics, Modern Languages and Linguistics BOUCHARD, Hugues, BA MSc PhD Sher., Mathematics and Statistics

BOUCHARD, Paul, BFA C'dia, MA Montr., Education

BOUCOCK, Cary, BA Trent, MA York (Can.), MPhil PhD Camb., Sociology and Anthropology

BOULIANNE, Emilio, BA MBA *Laval, Accountancy*

BOURJOLLY, Jean-Marie, BSc MSc Idem, MSc Montr., PhD Wat., Decision Sciences and Management Information Systems

BOYARSKY, Abraham J., BEng ME PhD McG., Mathematics and Statistics

BOYD, Gary, BSc Car., MSc Sask., PhD Br. Col., Education

BREIER, Susie, BA C'dia, MA McG., Library BRENDER, William J., BA MSc PhD McG., Psychology

BRENNAN, Kit, BA Qu., MFA Alta., Theatre BRESLAW, Jon A., BA MA Camb., PhD Calif. (Berkeley), Economics

BRIAN, Michael, MA Oxf., PhD Montr., English BRIGHT, Kairiin, BFA MFA Br. Col., Theatre BRIGHT, Pamela, BA BD Q'ld, MA PhD, Notre Dame (Ind.), Theological Studies

BRODT, Abraham, BSc McG., MBA PhD N.Y.U., Finance

BRODY, Josef, MSc Charles, PhD Czech., Mathematics and Statistics

BROSS, Michael, BA MA PhD *Manit., Psychology* BROUSSEAU, Pauline, BSc *U.Q.A.M.,* MSc *Montr.*, PhD *McG., Biology*

BROWN, Jeri, BA Westmar Coll., MEd Kent State, Music

BROWN, Nancy, BA Qu., MA McG., TESL (Applied Linguistics)

BRUCE, Iris, BA MA PhD *Tor., Liberal Arts College*

BRUNET, J. Pierre, BComm Montr., MBA Qu., PhD H.E.C., Management

BRUNETTE, Louise, BA BA MA Montr., PhD Sorbonne-Nouv. Paris, Études françaises

BRUTUS, Stéphane, BA S. Fraser, MA Bowling Green State, Management

BUI, Tien D., BASc Ott., MEng Car., PhD York (Can.), Computer Science

BUKOWSKI, William, BA Camisius Coll., MA PhD Mich., Psychology

BULGAK, Akif Asil, BS Tech. U. of Istanbul, MS PhD Wis., Mechanical Engineering

BUTLER, Gregory, BSc PhD Syd., Computer Science

BUXTON, William, BA Alta. Oxf., MA Lond., PhD Berlin, Communication Studies

BÜYÜKKURT, B. Kemal, BA MBA Bogazici, PhD Indiana, Marketing

BÜYÜKKURT, Meral, BA Bogazici, MBA PhD Indiana, Decision Sciences and Management Information Systems

BYERS, William P., BSc MSc McG., PhD Calif. (Berkeley), Mathematics and Statistics

BYRNES, Terence, BA Antioch, MA C'dia, English CADIEUX, Genevieve, BFA Ott., Studio Arts CAIGNON, Philippe, BA MA PhD Montr., Études françaises

CAMLOT, Jason, BA C'dia, MA Boston, PhD Stan., English

CAMPBELL, Bryan, BSc Tor., MA Tor. C'dia, PhD Montr., Economics

CANTY, Angelo, BCompSc Cork, MSc PhD Tor., Mathematics and Statistics

CAPOBIANCO, John A., BSc McM., DSc Geneva, Chemistry and Biochemistry

CAPPELLUTO, Ana, BFA C'dia, MEd McG., Theatre

CARAYANNIS, Anastasios, BA Amer. of Greece, MA PhD McG., Applied Human Sciences

CARNEY, Michael, BSocSc Keele, MBA PhD Brad., Management

CARR, Graham, BA MA Qu., PhD Maine, History CAWLEY, Richard, BA Manit., MS Flor., EdD Tor., Applied Human Sciences

CHABOT, Thérèse, BFA Coll. St-Maurice (Montr.), MFA Louisiana State, Studio Arts

CHAIKELSON, June S., BA MSc PhD McG., Psychology

CHALK, Frank R., BS MS PhD Wis., History CHAMBERS, Bette, BA MA C'dia, PhD McG., Education

CHANDRA, Ramdas, BEng Poona, MBA Delhi, Marketing

CHANDRAKANTHAN, A. Joseph V., MA Pontif. U., PhD Ott., DTh St. Paul (Ott.), Theological Studies

CHAPMAN, C. Andrew, BSc Red Deer Coll., BSc (Honours) Tor., Psychology

CHARLAND, Maurice, BA McG., MA Iowa State, PhD Iowa, Communication Studies

CHARPENTIER, Gilles, BA LèsL MA Laval, DèsL Sher., Études françaises

CHÂTEAUVERT, Jean, BA MA Laval, PhD Paris, Communication Studies

CHAUBEY, Yogendra P., BSc Ban., MA Roch., MStat Indian Statistical Inst., PhD Roch., Mathematics and Statistics

CHEEKE, J. David, BASc MASc Br. Col., PhD Nott., Physics

CHORNEY, Harold R., BA MA Manit., PhD Tor., Political Science

CHUKOVA, Stefanka, MSc PhD Sofia, Mathematics and Statistics

CHUNG, Richard, BCSc Manit., PhD Ohio State, Finance

CLARK, Tim, BA MFA MA C'dia, Studio Arts CLARKE, Lynda, BA McG., MA Tor., PhD McG., Religion

CLARKE, Murray, BA W. Ont., MA Dal., PhD W. Ont., Philosophy

CLEGHORN, Ailie, BA McG., MA C'dia, PhD McG., Education

COHEN, G. Elie, BSc MSc PhD McG., Mathematics and Statistics

COHEN, Maurice, BSc McG., PhD Calif. (Berkeley), Mathematics and Statistics

COLE, Sally, BSc *Trent*, MA *Nfld.*, PhD *Tor.*, Sociology and Anthropology

COLLARD, Chantal, PhD Paris, Sociology and Anthropology

CONWAY, Michael, BSc Sher., MA PhD Wat., Psychology

CORMAN, Don, BFA Central Wash., MFA N.S.C.A.D., Design Art

CORWIN, Mark, BMus Vic. B.C., MMus DMA Madison, WI, Music

COSTANZO, Anthony, BA Br. Col., MA Wash., Classics, Modern Languages and Linguistics

COUSINEAU, Marie-Hélène, BA Laval, MA U.Q.A.M., MFA Iowa, Communication Studies

COUSINEAU-LEVINE, Penelope, BA Manit., MFA SUNY (Buffalo), Studio Arts

CRAWFORD, Ronald L., BA MA PhD Yale, Management

CRONIN, Rev. Richard T., s.j., BA *Montr.,* MSc PhD *Fordham, Biology*

CROOKS, Frank, BComm McG., LLL LLB Ott.,
Management

CROSS, Patricia, BA MA PhD Car., Psychology CROSSMAN, Allan, BA MA PhD Penn., Music CROTEAU, Anne-Marie, BSc C'dia, BComm H.E.C., Decision Sciences and Management Information Systems

CSANK, Patricia, BA MA PhD C'dia, Psychology CULLINAN, Charles P., BSc Suffolk, MSc N.Y. State, Accountancy

CUMMINS, Christopher J., BA Camb., PhD S'ton., England, Mathematics and Statistics

CUPPLES, Claire G., BSc Vic. B.C., MSc Calg., PhD York (Can.), Biology

DAFNI, Galia, BSc Penn. State, MA PhD Prin., Mathematics and Statistics

D'AMICO, Miranda, BA MA C'dia, PhD McG., Education

DANIS, Marcel, BA Montr., MA Fordham, LLL Montr., Political Science

DAUDERIS, Henri J., BComm Montr., MBA McG., CA, Accountancy

DAVID, Chantal, BSc Montr., MEng PhD McG., Mathematics and Statistics

DE ALMEIDA, Roberto, BA Pontif. Catholic, MSc Campinas, PhD Rutgers, Psychology

DEAVES, Richard, BA MA PhD *Tor., Finance* de BRENTANI, Ulrike, BComm MBA *Sir G. Wms.*. PhD *McG.*. *Marketing*

DECARIE, M. Graeme, BA Sir G. Wms., MA Acad., PhD Qu., History

DECOSTE, Damon M., BA Tor., MA York, PhD McG., English

DEDRICK, Donald Paul, BA MA Car., PhD Tor., Philosophy

DE GUERRE, Don, BA W. Ont., MA Tor., MA Fielding Inst. of Santa Barbara, Applied Human Sciences

DELANEY, Patrick, BA C'dia, Accountancy DEMIRLI, Kudret, BSc MSc Middle East Tech., MSc Cornell, PhD Tor., Mechanical Engineering

DEMONT, Richard, BSc St.F.X., MSc Indiana, Exercise Science

- DÉNÈS, Georges, BSc MSc PhD Rennes, Chemistry and Biochemistry
- DEROME, Dominique, BA Montr., Building, Civil and Environmental Engineering
- DESAI, B.C., BEE Jad., MEE Purdue, MBA PhD McG., Computer Science
- DESPLAND, Michel, BA LicD Lausanne, ThD Harv., Religion
- DHAWAN, Kailash C., BA MA Panj.(I), MBA Ore., PhD N.Y., Marketing and International Business
- DI MICHELE, Mary, BA Tor., MA Windsor, English
- DICKS, Dennis J., BA Car., PhD Lond., Education
- DIDUR, Jill, BA *Qu.*, MA *York, English* DIUBALDO, Richard J., BA MA *McM.*, PhD *W. Ont., History*
- DOEDEL, Eusebius J., BSc MSc PhD Br. Col., Computer Science
- DONTI, Leah, BComm McG., MBA C'dia, CMA, Finance
- DOREEN, Dale D., BS MA PhD Alabama, Decision Sciences and Management Information Systems
- DOUGLAS, David, BA Qu., MA Northwestern, Cinema
- DOWNIE, Peter, BA New Br., Journalism DOYLE, Anna-Beth, BA Tor., PhD Stan.,
- Psychology
 DRAGE HALE, Rosemary, BA Kent State, MS
 Eastern Mich., MA MTS PhD Harv.,
- Religion
 DRAIMIN, Charles, BA Tor., MA Sir G. Wms.,
 PhD C'dia, CA, Accountancy
- DUCHASTEL, Pierre L., BComm Sher., MBA York, Management
- DUGAS, Michel, BA Ott., MA PhD Laval, Psychology
- DUMAS, Raymond, Cinema
- DUNCAN, Frederick, PhD Qu., Accountancy
- DUNLOP, Anne, BA Qu., MA Br. Col., PhD Warw., Art History
- DUPRÉ, Réjean, BSc Montr., MBA C'dia, Management
- DUTKEWYCH, Andrew, BFA *Philadelphia Coll.* of Art, Studio Arts
- DYER, Linda, BA McG., MSc PhD Carnegie-Mellon, Management
- EL-BADRY, Mamdouh M., BSc Cairo, MSc PhD Calg., Building, Civil and Environmental Engineering
- ELEKTOROWICZ, Maria, MEng PhD Warsaw Tech., Building, Civil and Environmental Engineering
- ELHAKEEM, Ahmed K., BSc MSc Alexandria, PhD S.M.U., Dallas, Electrical and Computer Engineering
- ELLIAS, Rod, BA Ott., MMusic Montr., Music ELLIOT, David, BFA Qu., MFA C'dia, Studio
- ELLIOTT, Colleen, BSc PhD Sask., Geology ELLISON, W. Charles, BA MA Indiana, Music ENGLISH, Ann M., BSc U. Coll. Dub., PhD McG., Chemistry and Biochemistry

- ERRUNZA, Marie-Josée, BA San Fran. Coll.,
 MA Calif., MBA I.N.C.A.E., Marketing
 ESMAIL M Nabil BScMechEng MSc(MechEng)
- ESMAIL, M. Nabil, BScMechEng MSc(MechEng)
 PhD Moscow State, PEng Mechanical
 Engineering
- ETEZADI-AMOLI, Jamshid, BEng Arya-Mehr U. of Tech., MA PhD Tor., Decision Sciences and Management Information Systems
- EVERGON, A. Lunt, BFA Mt. All., MFA Roch. Inst. Tech., Studio Arts
- FAIRBAIRN, Daphne, BSc Car., PhD Br. Col., Biology
- FAIRCHILD, Andrea, BA Sir G. Wms., BEd St. Jos., BA MA C'dia, PhD Québ., Art Education and Art Therapy
- FALSETTO, Mario, BA Car., MA PhD N.Y, Cinema
- FAMIRA, Helmut, Staatsexamen German Phil, Staatsexamen Phys Ed *Innsbruck*, PhD *McG.*, *Classics*, *Modern* Languages and Linguistics
- FANCOTT, Terrill, BEng McG., MSc Ecole Nat' Sup de l'Aéronautique, DSc Paris, Computer Science
- FARASHAHI, Mehdi, MBA *C'dia, Management* FAYERMAN, Gail, BComm *McG.,* CA, *Accountancy*
- FAZIO, Paul P., BASc Assum., MASc PhD Windsor, Ing, Building, Civil and Environmental Engineering
- FERGUSON, Ronald, BA W. Ont., Management FICK, Carolyn, BA Wayne State, MA Mich., PhD C'dia, History
- FIDLER, Geoffrey C., BA Wales, MA Lond., PhD McG., Education
- FISHER, Gordon, PhD S'ton., Economics FORD, David, BSc M.I.T., MSc PhD Ohio State, Computer Science
- FOSS, Brian, BA Winn., MA C'dia, PhD Lond., Art History
- FOSTER, Malcolm B., BA Syr., MA Minn., English
- FOX, John, Dip Art & Des Art Assoc. of Montr., Dip Slade Sch. of Fine Art, Lond., Studio Arts
- FRANCIS, Jane E., BMus Mt. All., MA Ott., MA New Br., MA PhD Bryn Mawr, Classics, Modern Languages and Linguistics
- FRANK, Barry, BSc MSc McG., PhD Br. Col., Physics
- FRANK, Marcie, BA Barnard, MA PhD Johns H., English
- FRANK, Mariana, BSc C'dia, MSc PhD Tor., Physics
- FREEDMAN, Ariela, BA C'dia, MA PhD N.Y., Liberal Arts College
- FRENCH, Stanley G., BA Car., MA Roch., PhD Virginia, Philosophy
- FROST, David B., BA MSc McG., PhD Birm., Geography
- FURLANI, André, BA MA Qu., PhD Tor., English

- GANESAN, Rajamohan, BEng Madur., MEng Auma, PhD I.I.Sc., Mechanical Engineering
- GARDINER, W. Lambert, BA C'dia, PhD Cornell, Communication Studies
- GARFIN, Judy, BA Br. Col., MFA Hoffenberger Sch., Baltimore, Studio Arts
- GARRIDO, José, BSc Montr., MSc Louvain, PhD Wat., Mathematics and Statistics
- GARVEY, Gregory, BSc MFA Wis., MSc M.I.T., Design Art
- GASHER, Michael John, BA MA S. Fraser, PhD C'dia, Journalism
- GATBONTON, Elizabeth, BSc St. Theresa's Coll., MA Ateneo de Manila PhD McG., TESL (Applied Linguistics)
- GAUCHER, Yves, RCA, Studio Arts
- GAUTHIER, Louise, BA MA Laval, MA PhD New Sch. Soc. Res., Sociology and Anthropology
- GAUVREAU, Danielle, BSc MSc PhD Montr., Sociology and Anthropology
- GAVAKI, Efie, BA MBA Alabama, MA PhD Indiana, Sociology and Anthropology
- GAVIN, James F., BA Fordham, MA Syr., PhD N.Y., Applied Human Sciences
- GEFIN, Laszlo K., BA Loyola, MA PhD McG., English, and Liberal Arts College
- GERLACH, Neil, BEd Regina, BL MA Sask., PhD Car., Sociology and Anthropology
- GERVAIS, Rev. Marc, s.j., BA Loyola, LPH Imm. Conception, MFA C.U.A., STL Regis, MA St. M., Dd'U Paris I, Communication Studies
- GERVAIS, Robert, BFA MBA C'dia, Management GHALY, Wahid S., BS MS Cairo, PhD M.I.T., Mechanical Engineering
- GHEYARA, Kelly, BComm Bom., PhD Okla., CPA, Accountancy
- GIBBONS, Gene, BFA Ohio, MA W. Virginia, MFA Purdue, Theatre
- GIDENGIL, Bayram Zeki, BA Istanbul, MBA N.Y., PhD Brad., Marketing
- GIGUÈRE, J. Charles, BEng McG., MEng PhD N.S.T.C., Electrical and Computer Engineering
- GIRALDEAU, Luc Alain, BSc MSc PhD McG., Biology
- GOBERT, Karine, Maîtrise des sciences en économétrie Rennes I, MSc PhD Montr., Economics
- GOHAR, Ashraf, BA MBA C'dia, Management GOLDSMITH, Bernice, BA C'dia, Social Aspects Engineering
- GOLLNER, Andrew B., BA Loyola, MA Car., PhD Lond. Sch. of Econ., Political Science
- GOPALAKRISHNAN, Mohan, BEng Guindy, MSc PhD Alabama, Decision Sciences and Management Information Systems
- GORA, Pawel, BA MA PhD Warsaw. Mathematics and Statistics
- GOUANVIC, Jean-Marc, LèsL Sorbonne et U. de Bretagne Occidentale, MA PhD McG.. Études françaises
- GOULD, Trevor, BA S.A., MA Car., Studio Arts

- GOULET, Vincent, BSc MA Laval, Mathematics and Statistics
- GOUW, Gerard J., BEng Twente, MSc PhD Qu., Mechanical Engineering
- GOWRI, Krishnan, BEng Annam., MEng PhD C'dia, Centre for Building Studies
- GOYAL, Suresh Kumar, BSc Agra, BScEng (Mech) Ranchi, MSc Strath., Decision Sciences and Management Information Systems
- GRANT, James, BSc W. Ont., MSc Qu., PhD Guelph, Biology
- GRAY, Christopher B., BCL LLB McG., BA St. Bonaventure, MA PhD C.U.A., Philosophy
- GRAY, Thomas, BA MA McM., PhD S. Fraser, Psychology
- GREENBERG, Reesa, BA McG., MA Tor., Art History
- GREENE, David F., BSc Calif. (Berkeley), MSc PhD Calg., Geography
- GROENING, Laura, BA Manit., MA Ott., PhD Car., English
- GROGONO, Peter, BA Queen's Coll., MA Camb., MCompSc PhD C'dia, Computer Science
- GROSS, Gerald, BA McG., MFA Carnegie-Mellon, MA Montr., Theatre
- GUERARD, Ghislaine, BA MA Montr., PhD Québ., Applied Human Sciences
- GULICK, Patrick, BA PhD Calif., Biology

Engineering

- GURNSEY, Rick, BA MSc PhD Qu., Psychology GUY, Richard William, MSc S'ton., PhD Liv., Building, Civil and Environmental
- HA-HUY, Kinh, BASc Ott., MASc Br. Col., DEng Sir G. Wms., Building, Civil and Environmental Engineering
- HABASHI, W.G., BEng MSc McG., PhD Cornell, Mechanical Engineering
- HADWIN, Allyson, BA (Psych.) BA (Ed.) MA Qu., Education
- HAGHIGHAT, Fariborz, BSc Sharif Tech., MSc Ariz., PhD Wat., Building, Civil and Environmental Engineering
- HALA, Suzanne, BA Vic. B.C., MA PhD Br. Col., Psychology
- HALE, Mark, BA Mich., MA Indiana, PhD Harv., Classics, Modern Languages and Linguistics
- HALL, Richard L., BSc PhD Lond., Mathematics and Statistics
- HAMALIAN, Arpi, BBA Amer. of Beirut, MA Wis., Education
- HANCOX, Richard, BA P.E.I., MFA Ohio, Communication Studies
- HANNA, Adel M., BEng MEng Cairo, PhD Tech. U. of N.S., Building, Civil and Environmental Engineering
- HARGADON, Robert, BA Car., MA C'dia, Commerce and Administration
- HARNAD. John. BSc McG., MS III., DPhil Oxf., Mathematics and Statistics
- HARTY, Sean, BA C'dia, M.S.Ed MA N.Y. State, DMin Grad. Theol. Found'n, Theological Studies

- HASEGANU, Eliza M., BEng MEng Polytechnic Inst. Brasov, PhD Alta., Mechanical Engineering
- HASHTRUDI ZAD, Shahin, BSc MSc Sharif Tech., Electrical and Computer Engineering
- HAVEN, Emmanuel, BA MA McG., Finance HAYES, James C., BSc Alta., MSc McG., Mathematics and Statistics
- HAYES, Jeremiah F., BEE Manhattan Coll., MS N.Y., PhD Calif. (Berkeley), Electrical and Computer Engineering
- HAZELTON, Hugh, BA Yale, MA C'dia, PhD Sher., Classics, Modern Languages and Linguistics
- HÉBERT, Louis, BSc MSc U.Q.T.R., Management
- HELMS, Nancy, BA Converse Coll., MA Calif., Theatre
- HEPPNER, Maxine, BA York, Contemporary Dance
- HERMAN, André, BA Polish State Film & Theatre Acad., Professional Dip Inst. des Hautes Études Cinématographiques, Paris, Cinema
- HERRINGTON, Muriel B., BSc McG., PhD McM., Biology
- HERZ, Judith S., BA Barnard Coll., MA PhD Roch., English
- HILL, Harry J.C., MA Aberd., English
- HILL, John L., BA Okla. Bapt., MA PhD Duke, History
- HILLEL, Joel, BSc MSc McG., PhD Br. Col., Mathematics and Statistics
- HINTON, Christopher, Cinema
- HOA, Suong Van, BSc Calif., MSc PhD Tor., Mechanical Engineering
- HOCHSTEIN, Alan, BComm Sir G. Wms., MA PhD McG., Finance
- HOMZY, Andrew, BMus Baldwin-Wallace, MMA McG., Music
- HONG, Henry, BEng MEng PhD C'dia, Mechanical Engineering
- HOODFAR, Homa, BA Tehran, MA Manc., PhD Kent, Sociology and Anthropology
- HOPP, Robert, BA MA *lowa, Applied Human Sciences*
- HORST, Mary Elizabeth, BA Eastern Mennonite Coll., MA Virginia, MA C'dia, Teaching of English as a Second Language
- HOWE, Nina, PhD Wat., Education
- HOWES, David, BA Tor., MA Oxf., LLB McG., Sociology and Anthropology
- HOWLETT, Debbie, BA C'dia, MFA Br. Col., English
- HUDSON, Robert, BA MA PhD W. Ont., Philosophy
- HUGHES, Lynn, BA MA Tor., Advanced Dip Vancouver Sch. of Art. Studio Arts
- HUNEAULT, Kristina, BA Windsor, MA C'dia, PhD Manc., Art History
- HUNTER, David, BA McG., PhD M.I.T., Philosophy
- HUTTER, Horst, BA Graz, MA Hunter, PhD Stan., Political Science

- IBRAHIM, A. Bakr, BComm Cairo, MBA Amer., PhD C'dia, CA RIA/CMA, Management
- IBRAHIM, Mohamed E., MSc Cairo, MBA PhD N. Texas, Accountancy
- IMBRIGLIO, Emilio B., BComm C'dia, MBA McG., CA, Accountancy
- INGRAM, Norman, BA Alta., MA Tor., PhD Edin., History
- IRVINE, Ian, BA Dub., MA Essex, PhD W. Ont., Economics
- ISLAM, M. Nural, BA MA Dacca, MA PhD McG., Economics
- JACK, David, BSc Tor., MSc PhD Alta., Chemistry and Biochemistry
- JACKSON, Christopher, Dip Premier Prix Conserv. de Musique de Montr., Music
- JACOBS, Ellen G., BA McG., MEd Tufts, Education
- JAIN, Arvind K., BA *I.I.T. Bombay,* MA *Carnegie,* PhD *Michigan, Finance*
- JAIN, Praveen, BE Alld., MASc PhD Tor., Electrical Engineering
- JAMAL, Muhammed, BA *Punj.*, MA PhD *Br. Col., Management*
- JAMIESON, Christine, BA St. Paul, MA PhD St. Paul/Ott., Theological Studies
- JANKOWSKI, Louis W., BSc Queen's Coll. (N.Y.), MA PhD Mich., Exercise Science
- JANS, James E., BA Manit., MA Maryland (Baltimore County), PhD McM., Psychology
- JAYAKUMAR, R., BE *Madr.*, MS *I.I.T. Madras*, PhD *C'dia*, Computer Science
- JEFFREY, Brooke, BA MA Sask., PhD Car., Political Science
- JETTE, Corinne, BEd McG., BA Montr., Computer Science
- JOHNS, Gary W., BA N. Carolina State, MA PhD Wayne State, Management
- JOHNSTON, Susan, BA McG., MA Hull (U.K.), PhD McG., English
- JOJICH, Danica, BFA W. Ont., MFA N.S.C.A.D., Studio Arts
- JOOS, Geza, BSc Loyola, MEng PhD McG., Electrical and Computer Engineering
- JORDAN, Terry, English JOSEPH, Norma, BA Brooklyn, MA Cuny, Religion
- JOURDAN, Christine, BSc MSc Montr., PhD
 A.N.U., Sociology and Anthropology
- JOY, Annamma, BA MA Madr., MBA C'dia, MA PhD Br. Col., Marketing
- JOYCE, Paul, BSc Acad., MSc PhD Dal., Chemistry and Biochemistry
- JULIEN, Benoît, BA Laval, MA W. Ont., Economics
- KALMAN, Calvin S., BSc McG., MA PhD Roch., Physics
- KANAAN, George K., BA Lebanese, MA S. III., PhD Wis., Accountancy
- KANNENGIESSER, Charles, BA Stras., PhD Inst. Cath. (Paris), Visiting Scholar in Theology

- KAPOOR, Manmohan Rai, BA *Panj.(I),* MBA *C'dia,* PhD *Tor.,* RIA/CMA, *Accountancy*
- KAPOOR, Narinder N., BSc MSc Panj.(I), PhD McM., Biology
- KASS, Raye, BA Sir G. Wms., MSW PhD Tor., Applied Human Sciences
- KATSANIS, Constantine, BEng MEng C'dia, DSc George Washington, Management
- KATSANIS, Lea Prevel, BA Vassar, MBA N.Y., PhD The George Washington, Marketing
- KAY, Linda, BA Syr., Journalism KERR, Richard, BA Sheridan Coll., Cinema KETTERER, David, BA Wales, MA Car., DPhil Sus., English
- KEVICZKY, Attila, BSc Fordham, MSc C.C.N.Y., PhD McG., Mathematics and Statistics
- KHALIFA, Mohamed, BSc Inst. Supérieur de Gestion de Tunis, MA PhD The Wharton School, Decision Sciences and Management Information Systems
- KHALIL, Zohel, BSc Alexandria, PhD Moscow State, Mathematics and Statistics
- KHENDEK, Ferhat, BEng Tizi, MSc Montr., Electrical and Computer Engineering
- KHORASANI, Khashayar , BSc MSc PhD Illinois, Electrical and Computer Engineering
- KILGOUR, Robert D., BSc C'dia, MSc Dal., PhD Flor. State, Exercise Science
- KIPLING, Arlin L., BEng Sask., MSc McG., PhD Exe., Physics
- KIRA, Dennis, BSc MSc S. Fraser, PhD Br. Col., Decision Sciences and Management Information Systems
- KIRPALANI, V.H. (Manek), MA Oxf., DSc Montr., Marketing
- KISILEVSKY, Hershy, BSc McG., PhD M.I.T., Mathematics and Statistics
- KLASA, S.L., BEng MEng Warsaw Inst. of Tech., MA Sorbonne, PhD Geneva, Computer Science
- KLINE, Rex B., BSc Aloma, MA PhD Wayne State, Psychology
- KNITTER, Rosalind, Management
- KNITTER, William, BA PhD Chic., Education
- KOLAK-DUDEK, Cheryl, BFA Mich., MAEd Hartford, MFA Col., DA N.Y., Studio Arts
- KORDA, Geraldine, BA Calif. (Berkeley), MPA U.C.L.A., MBA C'dia, Decision Sciences and Management Information Systems
- KORNBLATT, Mary Judith, BA Earlham Coll., PhD Cinc., Chemistry and Biochemistry
- KOSS, P., BA Calg., MA PhD S. Fraser, Economics
- KRAKOW, Kalman I., BEng McG., MS Cal. Tech., Ing, Mechanical Engineering
- KRANTZ, Frederick H., BA Col., PhD Cornell, History, and Liberal Arts College
- KRIEBER, Janine, BA MA Laval, PhD Inst. d'études politiques de Paris, Political Science

- KROKER, Arthur, BA Windsor, MS Purdue, PhD McM., Political Science
- KROL, Wolfgang, BFA Dip Art Ed Sir G. Wms., MFA C'dia, Studio Arts
- KRYZANOWSKI, Lawrence, BA *Calg.*, PhD *Br. Col.*, *Finance*
- KRZYZAK, Adam, MSc PhD Wroclaw, Poland, Computer Science
- KURFESS, Franz, PhD T.U. Munich, Computer Science
- KUSY, Martin I., BComm Sir G. Wms., MBA Windsor, PhD Br. Col., Decision Sciences and Management Information Systems
- LACHAPELLE, Guy, BA MSc Montr., MA PhD Northwestern, Political Science
- LACHAPELLE, Richard, BA BFA Ott., MA PhD C'dia, Art Education and Art Therapy
- LACROIX, Claude, BA Ott., MA Montr., PhD École des Hautes Études, Art History
- LADNER, Ida, BA Richmond, MSc Virginia, Applied Human Sciences
- LAFRAMBOISE, Kevin, BA Loyola, MSc C'dia, Decision Sciences and Management Information Systems
- LAKSHMANAN, Viravanallur S., BEng Coll. of Eng. & Tech., Karaikudi, MEng PhD I.I.Sc., Computer Science
- LAM, Clement, BSc PhD Cal. Tech., Computer Science
- LAM, Jose, MSc McG., BSc Br. Col., MBA C'dia, Management
- LAMARRE, Louise, BFA C'dia, Cert Études Cinématographiques Laval, Cinema
- LAMERTZ, Kai, BComm Br. Col., Management LANDRY, Elaine, BA MTM C'dia, PhD W. Ont., Philosophy
- LANDSBERGER Leslie M., BA Harv., MS PhD Stan., Electrical and Computer Engineering
- LANGDON, Paul, BA Windsor, BEd Tor., MAEd MFA C'dia, Art Education and Art Therapy
- LANGINIER, Corinne, BA Perpignan et Sciences Sociales, MA PhD Sciences Sociales, Economics
- LANGSHAW, Karen, Design Art
- LAROCHE, Michel, Dip D'IngE E.C. Paris, MSE Johns H., MPhil PhD Col., Marketing
- LAROSE, Benoit, BSc MSc PhD Montr., Mathematics and Statistics
- LATINOVIC, Vojislav N., Dip-Ing *Belgrade*, MSc *Calg.*, DEng *C'dia*, *Mechanical Engineering*
- LAURENCE, Jean-Roch, BA Montr., BA MA PhD C'dia, Psychology
- LAURION, Gaston, LèsL Montr., DES Dd'U Paris, Études françaises
- LAWRENCE, Marcus F., BSc U.Q.T.R., MSc PhD Varennes, Chemistry and Biochemistry
- LAYNE, Barbara, BFA Colo., MFA Kan., Studio Arts
- LE BRUN, M. Claire, LèsL *U. de Bretagne* Occidentale, France, MA PhD Montr., Études françaises

- LE-NGOC, Tho, BEng MEng McG., PhD Ott., Electrical and Computer Engineering
- LE VAN MAO, Raymond, BSc MSc Saigon, PhD Lyon, Chemistry and Biochemistry
- LEBLANC, M. Gregory, BA St. M., MA PhD Qu., Economics
- LEBLANC, Marie-Nathalie, BA McG., MSc Montr., Sociology and Anthropology
- LeCAVALIER, Guy, BA MA Montr., PhD Johns H., Sociology and Anthropology
- LEE, Buryung, BA Dougah, MBA Central Missouri S., PhD Temple, Accountancy
- LEFEBVRE, Martin, BEd C'dia, MA PhD U.Q.A.M., Cinema
- LÉGER, Benoît, BA MA PhD McG., Études françaises
- LEGROS, Dominique, BA MA Paris, PhD Br. Col., Sociology and Anthropology
- LEIBA-O'SULLIVAN, Sharon, BA Car., MBA McG., PhD Tor., Management
- LEQUIN, Lucie, BS MA Vt. PhD C'dia, Études françaises, and Women's Studies
- LERNER, Loren, BA McG., MA Mich., MLS McG., PhD Montr., Art History
- LEROUX, Alain, BSc MSc U.Q.A.M., Exercise Science
- LI, Hon Fung, BS MS PhD Berkeley, Computer Science
- LIGHTBOWN, Patsy M., BA N. Carolina, MA Yale, MEd PhD Col., TESL (Applied Linguistics)
- LIGHTSTONE, Jack N., BA Car., MA PhD Brown, Religion
- LITNER, Bluma, BA McG., MA Sorbonne/ Middlebury Coll., Vt., PhD Tor., Applied Human Sciences
- LITTLE, Edward, BEd Vic. B.C., MA Guelph, PhD Tor., Theatre
- LITUCHY, Terri R., BS N.Y. State, MS Colo. State PhD Ariz., Management
- LIU, Zeng-Rung, BA Soochow Taipeh, Taiwan, MA Vanderbilt, PhD Colo. State, Economics
- LOCKE, Joanne, BA Loyola, MLS McG., Education
- LOCKE, John W., BA *Emory*, MA *N.Y.U.*, *Cinema* LONG, Robert A., BComm *Br. Col.*, MBA *Wash.*, CA, *Accountancy*
- LOWENFELD, George, BSc Sir G. Wms., MSc McG., CA, Accountancy
- LYNCH, William E., BASc Wat., MA PhD Prin., Electrical and Computer Engineering
- LYPNY, Gregory, BA Tor., MBA York (Can.), PhD Tor., Finance
- MA, Shiping, MA Shanghai Jiaotong, MA PhD Wash.. Exercise Science
- MACINNIS, Neil, BFA N.S.C.A.D., MFA School of the Art I. Chic., Studio Arts
- MacKAY, Ronald, MA Aberd., PhD Montr., TESL (Applied Linguistics)
- MacKENZIE, Catherine, BA McM., MA MPhil PhD Tor., Art History
- MAILLÉ, Chantal, BSc MSc Montr., PhD U.Q.A.M., Women's Studies

- MAK, Tak Kwan, BSc Chinese H.K., MA York (Can.), PhD W. Ont., Decision Sciences and Management Information Systems
- MALY, Edward J., BS *Roch.*, PhD *Princ.*, *Biology* MAMFREDIS, Maria, BA *McG.*, *Religion* MANGAT, Bhupinder, BSc MSc PhD *Lond.*, *Biology*
- MANNADIAR, Jay, BComm C'dia, MBA McG., Finance
- MANN-FEDER, Varda, BA Brandeis, MA Tor., DEd McG., Applied Human Sciences
- MARCHAND, Eric, BSc MSc PhD Montr., Mathematics and Statistics
- MARCOTTE, Claude, MPS Ott., MSc Québ. (Trois-Riv.), Management
- MARKIEWICZ, Dorothy, BA MA PhD Ohio State, Applied Human Sciences and Psychology
- MARKWELL, Hazel, BA C'dia, MA Montr., PhD Ott., Theological Studies
- MARLER, David, BA Bishop's, BCL McG., Management
- MARSHALL, Christopher, BA McG., PhD Edin., Classics, Modern Languages and Linguistics
- MARTIN, Graham, BSc MSc New Br., Ing, Computer Science
- MASON, Sheila, BA McG., MA PhD Purdue, Philosophy
- MAVRIKAKIS, Catherine, BA MA PhD Montr., Études françaises
- McCartney, Andra, BA Trent, MAEd St.F.X., MA York, Communication Studies
- McEVENUE, Sean E., BA LPh Montr., MA Halifax, STL Montr., SSL SSD Rome, Theological Studies
- McGOWN, K. Lee, BS MBA Lamar, PhD N.
 Texas State, Marketing
- MCGREGOR, Frederick, BA C'dia, MPS Ott., Management
- McGUIRE, Jean, BA Mich., MS PhD Cornell, Management
- McINTOSH, James, PhD Lond., Economics McKAY, John, BSc DipNumerAnal Manc., PhD Edin., Computer Science, and Mathematics and Statistics
- McLAUGHLIN, J. Daniel, BA PhD New Br., Biology
- McQUEEN, Hugh J., BSc Loyola, BEng McG., MS PhD Notre Dame, Ing, Mechanical Engineering
- McSHEFFREY, Shannon, BA Car., MA PhD Tor., History
- MEHMET ALI, Mustafa K., MSc Bogaziçi, PhD Car., Electrical and Computer Engineering
- MENDELL, Marguerite, BA C'dia, PhD McG., School of Community and Public Affairs
- MERCHAWI, N. Sara, BSc MSc PhD Penn. State, Mechanical Engineering
- MERCIER, Caroline, Theatre
- METALLINOS, Nikos, BA Athens, MA San Fran. State, PhD Utah, Communication Studies

MILES, Michael, BA Car., MA Alta., Applied Human Sciences

MILLER, John, BA *Tor.*, MA PhD *McM.*, *English* MILLER, Sydney B., BSc PhD *McG.*, *Psychology* MILLS, Andrew, AB *Mich.*, MA *N. Carolina*, *Philosophy*

MISINA, Miroslav, BA C'dia, MA Qu., Economics MISRA, Sushil K., BSc Agra, MSc Gorak., PhD St. Louis, Physics

MOKHTARIAN, Faranak, BSc MSc PhD McG., Mathematics and Statistics

MOLZ, Rick, BS Clarkson, MBA Roch., PhD Mass., Management

MONGERSON, Eric, BFA Rockford Coll., MFA Humboldt State, Theatre

MONTANARO, Michael, Grad. Maj. Hartford Conserv., Contemporary Dance

MOORE, David, BA *Dub.*, BFA *Québ.*, MA *C'dia*, Studio Arts

MOORE, Peter, BA Virginia Military Inst., MA Virginia, PhD McG., Political Science MORELLI, François, BFA C'dia, MFA Rutgers,

Studio Arts
MORIN, Danielle, BSc MSc Montr., PhD McG.,

Decision Sciences and Management Information Systems MORRIS, Lori Ann, BA Tor., MA Paul-Valéry, PhD Laval, Teaching of English as a

Second Language
MORTON, Marjorie, BA Wis., MS Boston U.,
Public Communications. Cinema

MOSELHI, Osama, BSc Cairo, MEng Nfld., PhD C'dia, Building, Civil and Environmental Engineering

MOSS-WERBIN, Eleanor, BComm C'dia, MBA McG., CA, Accountancy

MOUNTAIN, Rosemary, BMus *W. Ont.*, MMus PhD *Vic. Tor., Music* MOWSZOWICZ-SUISSA, Zina, BA *C'dia*, MEd

McG., Management

MULLEN, Cathy, BFA Wis., MSc PhD Penn.

State, Art Education and Art Therapy MÜLLER, Frank, MA F.U. Berlin, PhD Ruhr., Economics

MULLIGAN, Catherine, BEng MEng PhD McG., Building, Civil and Environmental Engineering

MULRENNAN, Monica, BA PhD *Dub.*, *Geography* MUMBY, David, BA MSc *Alta.*, PhD *Br. Col.*, *Psychology*

MURPHY, Dennis, BA Loyola, MA San Fran. State Coll., PhD Calif. (Santa Barbara), Communication Studies

MWAWASI, Basil, BA Flor. Int'l, MA C'dia, Management

NADEAU, Chantal, BA MA Laval, PhD Montr., Communication Studies

NANDORFY, Martha, BA MA Ott., PhD Tor., Classics, Modern Languages and Linguistics

NARAYANAN, Lata, BS B.I.T.S., MS PhD Roch., Computer Science

NASH, Alan E., BA PhD Camb., Geography
NEBEBE, Fassil, BSc Ethiopia, MSc S'ton., PhD
Qu., Decision Sciences and
Management Information Systems

NEEMEH, Rafik A., BEng Alexandria, MEng PhD McG., Ing, Mechanical Engineering

NEWMAN, Elaine B., BSc McG., MA PhD Radcliffe, Biology

NIELSON, Greg, BA Regina, MA C'dia, PhD Montr., Sociology and Anthropology

NITOSLAWSKA, Marielle, BFA C'dia, MFA Nat'l. Film Sch., Lodz, Poland, Cinema

NIXON, Nicola, BA W. Ont., MA Br. Col., PhD Tor., English

NOVY, Christine, BA MA Oxf., Art Education and Creative Art Therapies

O'BRIEN, Kat, BA MFA Alabama, Design Art OCHOA, Luis, Cert Pub Admin Mexico, BA C'dia, MA McG., Classics, Modern Languages and Linguistics

O'CONNELL, Thomas, BComm MBA C'dia, Management

O'CONNOR, Dennis, BA PhD St. Louis, Philosophy

OKTAC, Asuman, BS Middle East Tech., MS PhD Iowa, Mathematics and Statistics

OLAOGUN, Modupé, BA MA *lb.*, PhD *York* (Can.), English

OPATRNY, Jaroslav, MSc Charles, PhD Wat., Computer Science

OPPENHEIM, Michael D., BA S. Calif., MA PhD Calif., Religion

OPPENHEIMER, Robert J., BSComm & EngSc MBA Drexel, PhD Tor., Management

ORNSTEIN, Jack, BA MA Br. Col., PhD Calif. (San Diego), Philosophy

ORR, Leslie, BSc MA PhD McG., Religion OSTIGUY, Lisa, BA Dal., MA PhD Iowa, Applied Human Sciences

OSTIGUY, Pierre, BA McG., MA Tor., PhD Calif. (Berkeley), Political Science

OTCHERE, Dan, BSc Lond. & Ghana, MA Br. Col., PhD McG., Economics

OVERBURY, Olga, BA Loyola, MA PhD C'dia, Psychology

PAIKOWSKY, Sandra, BA Sir G. Wms., MA Tor., Art History

PAKNYS, Robert, BEng McG., MSc PhD Ohio State, Electrical and Computer Engineering

PANET-RAYMOND, Silvy, MEd Montr., Contemporary Dance

PAQUET, Joey, BSc MSc PhD Laval, Computer Science

PARC, Pierre, LèsL DES Paris, Études françaises

PARIS, David L., BA York (Can.), MA Indiana State, PhD Ore., Exercise Science

PARISER, David, BA Reed Coll., MSc Southern
Ill., MEd DEd Harv., Art Education
and Art Therapy

PARK, Adrian, BSc Leic., PhD Glas., Geology PARK, Tae, BA N.Y., MBA PhD Mich., Finance PARKER, Robert J., BA Loras Coll., MA PhD Iowa, Art Education and Art Therapy

PASK, Kevin, BA Yale, PhD John H., English PATTERSON, Judith, BSc Qu., MSc Calg., PhD Qu., Geology

- PAULIN, Michele, LLB Sher., EMBA C'dia, Marketina
- PAVLOV, Andrey D., BSc Sonoma State, MA Calif., MBA Amer. Grad. Sch. of Int'l Mana.. Finance
- PECHTER, Edward, BA Cornell, MA PhD Calif. (Berkeley) English
- PEDERSEN, Diana, BA Br. Col., MA PhD Car., History
- PEGNA, Joseph, BSc MEng Paris, PhD Stan., Mechanical Engineering
- PEKAU, Oscar A., BASc Tor., DIC Imperial, MSc Lond., PhD Wat., PEng Ont., Ing, Building, Civil and Environmental Engineering
- PERIGOE, Ross, MSc Syr., Journalism PESLHERBE, Gilles, BA Lycée Corneille, MA École Sup. Chimie Lyon, PhD Wayne State, Chemistry and Biochemistry
- PETERSON, Leland, BA DePaul, MA School of the Art I. Chic., Arts Therapies
- PETRIE, Brian M., BPE MA Alta., MA PhD Mich. State. Sociology and Anthropology
- PETRUSHKA-BORDAN, Tima, BA MA PhD McG., Management
- PFAUS, James G., BA Amer. of Wash., MA PhD Br. Col., Psychology
- PHILLIPS, Natalie, BSc MSc PhD Dal., Psychology
- PLOTEK, Leopold, BFA Sir G. Wms., Studio Arts PLOTKIN, Eugene I., BSc MSc PhD Leningrad, Electrical and Computer Engineering
- POIRIER, Maben, BA Montr., MA PhD McG., PhD McM., Political Science
- POOROOSHASB, Hormoz B., BS Manc. U.K., PhD Camb., Building, Civil and Environmental Engineering
- POTVIN, Francine, BFA N.S.C.A.D., MFA C'dia, Studio Arts
- POTWOROWSKI, Christophe, BA C'dia, MA PhD St. M. Coll. Tor., Theological Studies
- POULIN-DUBOIS, Diane, BSc MSc PhD Montr., Psychology
- POWLOWSKI, Justin B., PhD Minn., Chemistry and Biochemistry
- PRICE, Everett M., BA Sir Ġ. Wms., Cert d'EtSup DES Dd'Etat Grenoble, Political Science
- PROBST, David K., DSc Bruxelles, Computer Science
- PROCHNER, Larry, BAA Ryerson, MA C'dia, EdD Tor., Education
- PROPPE, Harald W., BSc MSc PhD McG., Mathematics and Statistics
- PUGH, Martin D., BSc PhD Leeds, Mechanical Engineering
- PUSHKAR, Dolores, BA MA Manit., PhD Sask., Psychology
- RACINE, Martin, BA MA Montr., Design Art RADECKI, Brigitte, BFA MFA C'dia, Studio Arts RADHAKRISHNAN, Thiruvengadam, BE Madr., MTech PhD I.I.T. Kanpur, Computer Science
- RAJAEI, Ali, BSc Sharif U., MS PhD Prin., Mathematics and Statistics

- RAKHEJA, Subhash, BA PhD C'dia, Mechanical Engineering
- RAMACHANDRAN, V., BSc DIISc(ECE)
 DIISc(Electronics) PhD I.I.Sc.,
 Electrical and Computer Engineering
- RAMAMURTHY, Amruthur S., BSc St. Philomena's Mys., BEng Nat. Inst. of Eng., Mys., MSc I.I.S.C., PhD Purdue, Building, Civil and Environmental Engineering
- RAO-SAHIB, Padma, BA George Washington, PhD Cornell, Economics
- RAPHAEL, Robert, BSc MA Wat., PhD McG., Mathematics and Statistics
- RAUDSEPP, Enn, BA McG., MS Col., PhD McG., Journalism
- RAUT, Rabin, BTech MTech Calc., PhD C'dia, Electrical and Computer Engineering
- RAVVIN, Norman, BA MA Brit. Col., PhD Tor., Religion
- RAY, Sourav, BTech I.I.T., MS Texas A&M, Marketing
- REGLER, Erwin, MFA N.Y. State, Design Art REIMER, William C., BA MA PhD Br. Col., Sociology and Anthropology
- REISS, Charles, BA Swarthmore, MA PhD Harv., Classics, Modern Languages and Linguistics
- RILLING, Juergen, MSc E. Anglia, PhD Illinois I.T., Computer Science
- RIST, Peter, HNC S.E. Essex Tech. Coll., MA PhD N.Y., Cinema
- RITTER, Donald, BA Wat., MSc M.I.T., Design Art
- RIVARD, Hugues, BEng MASc C'dia, PhD Carnegie-Mellon, Building, Civil and Environmental Engineering
- ROA-SAHIB, Padma, Economics
- ROBIDOUX, Sébastien, BSc Montr., Chemistry and Biochemistry
- ROBINSON, Ira, BA Johns H., MA Col., PhD Harv., Religion
- ROBINSON, Sandra M., BA Col., MBA N.Y., CPA, Accountancy
- ROHRAUER, Gregor, BEng C'dia, Mechanical Engineering
- ROJAS-TREMPE, Lady, BA MA Ott., PhD Laval, Classics, Modern Languages and Linguistics
- RONQUIST, Eyvind C., BA St. John's Maryland, MA PhD Chic., English
- ROSCOE, Wendy Nadine, BBus C'dia, CA, Accountancy
- ROSENBLATT, Jerry A., BA McG., MBA PhD C'dia, Marketing
 ROSS, Christopher A., BSc W.I., MBA PhD
- W.Ont., Marketing
 ROSS, Yaron, BMusic Tel Aviv, DMus Montr.,
- Music ROTH, Lorna, BA Sir G. Wms., MA McG., Communication Studies
- ROY, Robert M., BSc MA PhD *Tor., Biology* RUBY, Sylvia M., BSc *Nfld.,* MSc PhD *W. Ont., Biology*
- RUDIN, Ronald E., BA Pitt., MA PhD York (Can.), History

RUKMANI, Trichur Subramanian, BA MA PhD DLitt *Delhi*, *Religion*

RUSSELL, Catherine J., BA *Tor.*, MA PhD *N.Y.*, *Cinema*

RUWEDEL, Mark, BFA *Kutztown* MFA *C'dia, Studio Arts*

SAAD, Gad, BSc MBA McG., MS PhD Cornell, Marketing

SAADE, Raafat, BEng MASc PhD C'dia, Decision Sciences and Management Information Systems

SACCÁ, Elizabeth J., BS MEd PhD Penn., Art Education and Art Therapy

SAHNI, Balbir S., MA Delhi, MBA N.Y., PhD New Sch. Soc. Res., Economics

SALÉE, Daniel, BA McG., MSc PhD Montr., School of Community and Public Affairs

SALVATORE, Filippo, BA McG., MA PhD Harv., Classics, Modern Languages and Linguistics

SAMPSON, Michael, Economics

SANDERS, Lionel J., BA MA Lond., PhD McM., Classics, Modern Languages and Linguistics

SANDERSON, Warren, BA MA Boston, PhD N.Y.U., Art History

SATIR, Ahmet, BSc Turkey, MSc Birm., PhD Manc., Decision Sciences and Management Information Systems

SAWCHUK, Kim, BA Winn., MA PhD York (Can.), Communication Studies

SAWADOGO, Cilia, BA C'dia, Cinema

SCHADE, Rosemarie, BA MA York (Glendon Coll.), DPhil York (U.K.), History

SCHEER, Herfried, BA MA Alta., PhD McG., Classics, Modern Languages and Linquistics

SCHEINBERG, Stephen J., BSc Chic., MSc PhD Wis., History

SCHMID, Richard F., BA St. Johns, MA PhD Ariz., Education

SCHNACKENBERG, Heidi, BA N.Y. State, PhD Ariz. State, Education

SCHOFIELD, Julian, BA McG., MA C'dia, MA PhD Col., Political Science

SCHWARTZMAN, Alex E., PhD McG., Psychology

SCOTT, William R., BComm Car., MBA PhD Chic., Distinguished Visiting Accountancy

SEGALOWITZ, Norman, BSc McG., PhD Oxf., Psychology

SEGOVIA, Juan J., BComm Guanajuato, DEA PhD Paris-Dauphine, Accountancy

SELLERS, William R., BS Rhode Island, MEd Pitt., EdD Boston, Exercise Science

SEPPANEN, Ritva, BSc McG., BA Sir G. Wms., MA C'dia, PhD Montr., English

SERAGANIAN, Peter, BA McM., MA PhD Dal., Psychology

SERBIN, Lisa A., BA Reed Coll., PhD SUNY (Stony Brook), Psychology

SERPONE, Nick, BSc Sir G. Wms., PhD Cornell, Chemistry and Biochemistry SEVIGNY, Pierre, BA BComm Laval, Management

SHANKER, Latha, BEng Madr., MTech I.I.T. Madras, PhD Flor., Finance

SHAPIRO, Barbara, BA Temple, MSS Bryn Mawr, Management

SHARMA, Mahesh, BEng Inst. Eng. & Defence Train. Coll., MEng MBA McG., Decision Sciences and Management Information Systems

SHARMA, Ramesh C., MA MSc Delhi, PhD Tor., Physics

SHARMA, V. Alex, BA Manc. Coll., MA MS PhD Indiana, TESL (Applied Linguistics)

SHARMAN, Lydia, MA C'dia, PhD R.C.A., Design Art

SHAVER, Frances, BA MA Br. Col., PhD Montr., Sociology and Anthropology

SHAW, Steven, BA MA PhD C'dia, Education SHEININ, Rose, PhD Tor., DSc Acad., DHumLett Mt. St. Vin., Biology

SHIN, Joseph, BSc Swarthmore Coll., MSc Cornell, Physics

SHINGHAL, Rajjan, BE Burd., MTech Kan., MMath Wat., PhD McG., Computer Science

SHIZGAL, Peter, BA McG., MA PhD Penn., Psychology

SHLOSSER, Franziska E., BA Sir G. Wms., MA PhD McG., History

SHORT, George D., BPE Alta. (Edmonton), BEd Alta. (Calg.), MPE Windsor, Exercise Science

SHRESTHA, Keshab, MA MS PhD SUNY (Buffalo), Finance

SHULMAN, Harvey, BA Sir G. Wms., MA Car., Political Science, and Liberal Arts College

SI, Steven, BSc E. China, MBA PhD Wash., Management

SIAM, John, BA MA PhD C'dia, Finance SIERPINSKA, Anna, MSc Warsaw, PhD Cracow, Mathematics and Statistics

SIGGEL, Eckhard, Diplng Berl., MA Montr., PhD Tor., Economics

SIGOUIN, Christian, BAdmin MSc Montr., Chemistry and Biochemistry

SILAUSKAS-WALKER, Gina, BA Lafayette Coll., MA PhD C'dia, Education

SIMON, Sherry, BA Brandeis, MSc Hautes Études, Paris, PhD McG., Études françaises

SIMPKINS, Harold J., BA Sir G. Wms., MBA C'dia, Marketing

SIMS, William M.A., BA MA PhD *Tor., Economics* SINGER, Martin, BA *Hunter,* MA PhD *Mich., History*

SKINNER, Cameron, BSc PhD McG., Chemistry and Biochemistry

SLACK, Brian, BA Lond., MA PhD McG., Geography

SMITH, Ronald A., PhD *McG., Education*

SNOW, Stephen, BA *Emerson*, MA PhD *N.Y.*, *Arts Therapies*

SOLWAY, David, BA QMA McG., MA C'dia, MAEd Sher., PhD Lajos Kossuth U., English

- SORFLEET, John R., BA MA Manit., PhD New Br., English
- SOUFANI, Khaled, BA PhD Nott., MA C'dia, Finance
- SOUREN, Paul, BE ME Jad., PhD Wis., Decision Sciences and Management Information Systems
- SPENSLEY, Philip, BA Wis., MA PhD Wayne State, Theatre
- SRIVASTAVA, Tariq N., BSc MSc Luck., PhD Gorak., PhD Sheff., Mathematics and Statistics
- ST-MARTIN, Denis, BSc MSc Montr., PhD Car., Political Science
- ST-ONGE, Jean, BComm McG., MBA C'dia, Marketing
- ST-PIERRE, Armand, BAcc U.Q.A.M., MBA PhD McG., PhD Nova Southeastern, Decision Sciences and Management Information Systems
- STACK, Dale M., BA McG., MA New BR., PhD Qu., Psychology
- STASESON, Rae, BFA Regina, MFA Rutgers, Communication Studies
- STATHOPOULOS, Theodore, DipEng Athens, MESc PhD W. Ont., PEng Ont., Building, Civil and Environmental Engineering
- STELCNER, Morton, BComm McG., MA PhD Syr., Economics
- STERLING, Maureen, BA Car., MBA Tor., PhD Qu., Accountancy
- STERN, Ronald J., BSc Cooper Union, MSc PhD Northwestern, Mathematics and Statistics
- STEWART, Jane, BA Qu., PhD Lond., Psychology
- STIHARU, Ion, MASc PhD Politech. Inst. Bucharest, Mechanical Engineering
- STOETT, Peter, BA MA Guelph, PhD Qu., Political Science
- STORMS, Reginald K., BSc PhD Alta., Biology SU, Chun-Yi, BEng X.U.T. (China), MSc PhD S. China U. of Tech., Mechanical Engineering
- SUEN, Ching Y., BScEng MScEng H.K., MASc PhD Br. Col., Computer Science
- SULLIVAN, S. John, DipPhysEd Otago, MSc PhD Wat., Exercise Science
- SVOBODA, Jaroslav V., Diplng *Prague*, DEng *C'dia*, *Mechanical Engineering*
- SWEDBURG, Randy B., BS Bemidji, MEd EdD Idaho, Applied Human Sciences
- SWITZER, Lorne, BS Wharton, MA PhD Penn., Finance
- SYNNOTT, Anthony J., BSc Lond., MA W. Ont., PhD Lond., Sociology and Anthropology
- SZABAD-SMYTH, Linda, BFA Sir G. Wms, MA C'dia, Art Education and Art Therapy
- SZABO, Manfred E., MA Oxf., MSc PhD McG., Mathematics and Statistics
- SZAMOSI, Geza, DSc Hungarian Acad. of Sciences, PhD Bud., Science College
- SZPIRO, Daniel A., BSc Wat., MBA Qu., MSc Lond. Sch. of Econ., Accountancy

- TADDEO, Donat J., BA Loyola, MA S. Calif., PhD Stan., Communication Studies
- TAHAR, Sofiene, BSc MSc Darmstadt, PhD Karisruhe, Electrical and Computer Engineering
- TANGUAY, Denise, BFA MA C'dia, Arts Therapies
- TAO, Lixin, BSE Nanjing MSE E. China, MSE Penn., Computer Science
- TAYLOR, Marilyn, BA Sask., MA Wis., PhD Tor., Applied Human Sciences
- TAYLOR, William D., BA Wat. Luth., MBA McM., PhD H.E.C. Montr., Management
- TEE, Oswald S., BSc Leic., MSc McM., PhD E. Anglia, Chemistry and Biochemistry
- TEFFETELLER, Annette, PhD McG., Classics, Modern Languages and Linguistics
- TERRY, Don, BA Nfld., BFA MFA C'dia, Cinema
- THAINE, Francisco, BA San Andres, MA PhD Inst. de Matemàtica, Mathematics and Statistics
- THAKOR, Mrugank V., BA BL Bom., MBA B'Iore, PhD Indiana State, Marketing
- THORNTON, Patricia A., MA PhD Aberd., Geography
- THULASIRAMAN, Krishnaiyan, BE MSc Madr., PhD I.I.T. Madras, Electrical and Computer Engineering
- THWAITES, Hal, BA Loyola, MA C'dia, Communication Studies
- TIRTIROGLU, Dogan, BSc Middle East Tech., MBA St. John Fisher Coll., PhD Conn., Finance
- TITTLER, Robert, BA Oberlin Coll., MA PhD N.Y., History
- TIWARI, Ramji, MSc PhD Ban., Mathematics and Statistics
- TOLEDO-FREIWALD, Bina, BA Hebrew (Israel), BA Tel Aviv, MA PhD McG., English
- TOMBERLIN, Jerry, BS Flor., MPH Mich., PhD Harv., Decision Sciences and Management Information Systems
- TREMBLAY, Reeta C., BA MA Kashmir, MPhil J. Nehru, MA PhD Chic., Political Science
- TRUEMAN, Christopher W., BEng MEng PhD McG., Electrical and Computer Engineering
- TSANG, Adrian, BSc Alta., MSc PhD York (Can.), Biology
- TURCOTTE, Marie-France, BSc Montr., MSc PhD Québ., Management
- TURNBULL, Joanne, BSc MSc Sask., PhD A.N.U., Chemistry and Biochemistry
- TURNER, David, BFA C'dia, MMusic Miami, Music
- TWEEDIE, Katherine, BA McG., MFA N.Y. State, Studio Arts
- UDY, John M., BA *Durh.*, PhD *C'dia*, Geography and Urban Studies
- UPSHUR, John A., BA Yale, MA PhD Mich., TESL (Applied Linguistics)
- USABEL, Miguel, BSc PhD Complutense Madrid, Mathematics and Statistics

VALLEJO, Catherine, BA MA PhD Montr., Classics, Modern Languages and Linguistics

VAN FOSSEN, Rachael, BA McG., Theatre VAN NUS, Walter, BA MA PhD Tor., History VARIN, Luc, BSc PhD C'dia, Biology VASIL, Alex, BComm LA McG., CA, Accountancy VASILOPOULOS, Panagiotis, BA Salonica, MA C'dia, PhD Montr., Physics

VATISTAS, Georgios H., BEng MEng PhD C'dia, Mechanical Engineering

VERTHUY, Maïr E., BA Lond., MA Tor., Études françaises

VICHI-BERMUDEZ, Maria del Rosario, MA Havana, Classics, Modern Languages and Linguistics

VILLATA, Bruno, BA C'dia, PhD Torino, Italy, Classics, Modern Languages and Linguistics

VIPOND, Mary, BA Qu., MA PhD Tor., History von GRUNAU, Michael, BSc MA PhD Tor., Psychology

WADE, P.F., BA Tor., MSc Montr., PhD McG., Decision Sciences and Management Information Systems

WAGNER, Marie-France, BSc Lycée Camille, BA MA PhD Montr., Etudes françaises

WAGNER, Norma, BFA Mt. All., MA C'dia, Studio Arts

WAGSCHAL, Marion, BA Sir G. Wms., Studio Arts

WALKER-RAMISCH, Sandra, BA MA Car., PhD C'dia, Religion

WANG, Chunyan, BSc Jiaotong, Shanghai, MSc PhD Paris, Electrical and Computer Engineering

WARSAME, Hussein, BSc Souak Nat'l., MBA California S., Accountancy

WAUGH, Thomas, BA W. Ont., MFA MPhil PhD Col., Cinema

WAYNE, Andrew, BSc Tor., MA PhD Calif., Philosophy

WEBER, Sandra, BA MA McG., PhD Alta., Education

WEMMERS, Jo-Anne, BA McG., MA PhD Lev., Sociology and Anthropology

WERNER, Janet, BFA Maryland Inst. of Art, MFA Yale, Studio Arts

WHATLING, Michael, BA MA C'dia, Education WHEELER, David, BSc Lond., Mathematics and Statistics

WHIDDEN, James, BA Dal., MA PhD Lond., History

WHITE, Joanna, MA Yale, PhD McG., TESL (Applied Linguistics)

WHITTOME, Irene, RCA Dip Van. Sch. of Art, Studio Arts

WIDDEN, Paul, BSc Liv., PhD Calg., Biology WOODSIDE, Barbara, BSc University Coll., PhD McM., Psychology

WRIGHT, Sandra, BA MSc PhD S. Fraser, Psychology

WRITH, Julia, BA MA W. Ont., English

XIA, Guang, BA Wuhan, MA Peking, PhD Tor., Sociology and Anthropology

XIAO, Xinran, BEng MEng Beijing Inst., PhD Brussels, Mechanical Engineering

XU, Haiqing, BArch Chongqing Jianzhu, Phd Sheff., Geography

ZACHARIAS, John P., BA Sask., MA Br. Col., Geography, and Urban Studies

ZAHEERUDDIN, Mohammed, BE Osm., MSc PhD Alta., Building, Civil and Environmental Engineering

ZEMAN, Vladimir, PhD Charles, Philosophy ZHANG, Xuelin, BA NanKai, MA Central U. Finance and Banking, PhD C'dia, **Economics**

ZIELINSKI, Zenon A., Inz MTechSc DTechSc Politechnika Warszawska, Ing. Building, Civil and Environmental Engineering

ZMEUREANU, Radu G., BEng MEng Bucharest, PhD C'dia, School for Building

ZUCKER, Carole, BA Clark, MA PhD N.Y., Cinema

Research Professor

CLEGHORN, Ailie, BA McG., MA C'dia, PhD McG., Research Associate Professor of Education

Librarians

The following information was updated as of October 1, 1999.

APPLEBY, Judy, BA Sir G. Wms., MLS McG., Head, Information Services

BACHAND, Michelle, BPéd BBibl MBibl Montr., Head, Vanier Library

BAIROS, Maria-Helena, BA MLS McG., Reference/Selection Librarian (Vanier)

BIEN, Linda, DipArt Cooper Union for Advancement of A. & S., BS Col., MS L.I.U., Slide Librarian, Fine Arts (Art History Slide Library)

BOBER, Christopher, BA C'dia, MLIS McG., Reference/Selection Librarian (Vanier) BRAZINSKIS, Erika, BA Sir G. Wms., MLS McG., Head, Bibliographic Access

BREIER, Susie, BA C'dia, MLIS McG., Assistant Systems Librarian

CAMERON, Dorothy, BA BLS McG., Reference/Librarian (Webster)

CARPENTIER, Louise, BA Laval, BLS Tor., MBibl Montr., MA C'dia, Head, Government Publications and Special Collections

COUGHLIN, Carol, BSc C'dia, MLS Tor., Reference/Selection Librarian (Webster)

- CURRAN, William M., BA Loyola, MEd Ott., MLS McG., Director, University
- DEALY, Jacqueline, BA C'dia, MLS McG., Reference/Selection Librarian (Webster)
- DYKYJ, Oksana, BÁ C'dia, MA N.Y., MLIS McG., Head, Visual Media Resources in IITS
- FERLEY, Margaret, BA Sir G. Wms., BA Car., MLS McG., Head, Serials Accounts Rec/Mail
- GOLUBOWSKI, Ann, BA McG., MPs Montr., MLS McG., Reference/Selection Librarian (Webster)
- GRAZIANO, Vince, BA C'dia, MA York (Can.), MLIS McG., Reference/Subject Librarian (Webster)
- HARRIS, Lee, BSc MLS McG., Reference/ Selection Librarian (Webster)
- HAWKE, Susan, BA Loyola, MLS McG., Associate Librarian, Career Resource Centre
- HOCHMANN, Gabriella, BA Sir G. Wms., MLS McG., MA C'dia, Reference/ Selection Librarian (Webster)
- HOFFMAN, Sandra, BA Wat., BLS Tor., MLS McG., Reference/Selection Librarian (Webster)
- HUBBARD, Marlis, BA Missouri, MLS Emporia Kansas State Coll., Coordinator, Career Resource Centre
- HUME, Margaret, BA New Br., MLIS McG., Cataloguing Librarian (Non-Book Material)
- KAPA, Dubravka, BSc MSc Belgrade, MLIS McG., Reference/Selection Librarian (Webster)

- MacLAURIN, Charlotte, BA MLS McG., Reference/Selection Librarian (Webster)
- MASSICOTTE, Mia, BA N.Y. State (Platts.), MLS McG., Assistant Director, Collections Services
- NOBLE, Ruth, BSc MLS McG., Reference/ Selection Librarian (Webster)
- ORBACH, Marvin, BA BLS MLS McG., Reference/Selection Librarian (Vanier)
- OTCHERE, Freda, BA Br. Col., MLS McG., Acting Head, Processing/Database and Accounts Maintenance
- PERRY, Kathleen, BA Tor., MLS W. Ont, Slide Librarian, Fine Arts
- POULIN, Sonia, BA C'dia, MLS McG., Systems Librarian
- REINHART, Melinda, BA Calg., MLIS McG., Reference/Selection Librarian (Webster)
- RUBINLICHT, Lillian, BA Sir G. Wms., MLS McG., Assistant Director, Planning and Priorities
- SAUVÉ, Diane, BA C'dia, MLIS Montr., Library Instruction and Reference Subject Librarian
- SENDEK, Irene, BA Marianopolis, BLS MLS McG., Assistant Director, User Services
- VILENO, Luigina, BA MLIS McG., Reference/Selection Librarian (Vanier)
- WRIGHTSON, Robert, BA Qu., MLS W. Ont., Reference/Selection Librarian (Vanier)

Faculty Part-Time

The following information was updated as of October 1, 1999.

ABDEL-RAHMAN, Mohamed, Building, Civil and Environmental Engineering ABDUL AL-KHABYYR, Muhammad, Music ABDUL AL-KHABYYR, Nasyr, Music ABI-NADER, Georges, Physics ABITOL, Evelyne, Études françaises ABRAN, Henri, Études françaises ADEL, Alisa, Economics ADLEY, Thomas J., Chemistry and Biochemistry AHARONIAN, Lara, Études françaises AKMAN, Geraldine, Geography AL-ATRAQCHI, Leila, Sociology and Anthropology ALBERTSON, Constant, Art Education and Art Therapy

ALHASSAN, Amin Mohammed, Communication

Studies ANASTASOPOULOS, Susan T., Economics

ANDERSON, Hugh, Journalism ANDERSON, Sandra, Exercise Science ANDREWS, Alanoly J., Engineering and Computer Science

ANTHONY, Elizabeth, Art Education and Art Therapy

ANTOLIN, Francisco, Classics, Modern Languages and Linguistics

ANTONIO, Gary, Music

ANTONOPOULOS-ALEXANDER, Anna, Simone de Beauvoir Institute

ANTONOVA, Slavka B., Communication Studies ANWEILER, Rebecca, Studio Arts

APRAHAMIAN, Sima, Sociology and Anthropology

ARAMAKI, Michiko, Simone de Beauvoir

Institute ARCHAMBAULT, Eric, Engineering and

Computer Science ARSENAULT, Luc A., Accountancy

ASHBY, Richard, Marketing

ASKEW, Pamela, English

ASLIN, Lauren, Education

ASTENGO, Francesca, Political Science

ASTLE, Robert, Theatre

AUCLAIR, Myra, Classics, Modern Languages and Linguistics

AULLS, Katharina, Classics, Modern Languages and Linguistics

AYADI, Mohamed, Finance

BABINEAU, Dan, Communication Studies BRISCOE, Ken, Communication Studies BALDWIN, Mary, Chemistry and Biochemistry BROCHU, Jacques, Contemporary Dance BALK, Roger, Engineering and Computer BROOKS, Christopher, Geography Science BROWN, Allan, Electrical and Computer BANCHET, Julien, Physics Engineering BARAZANDE-POUR, Majid, Electrical and BROWN, Benson, Mathematics and Statistics Computer Engineering BROWN, Daniel, Classics, Modern Languages BARBIERI, Richard, Marketing and Linguistics BROWN, Nancy L., Teaching of English as a Second Language BARCLAY, Barbara A., Teaching of English as a Second Language BARKER, Leslie, Exercise Science BRUHN DE GARAVITO, Joyce, Classics, BARRAFATO, Anna, Education Modern Languages and Linguistics BARSS, Patchen, Journalism BUCHANAN, Craig, Computer Science BATH, Dana, English BURSTEIN, Sam, Psychology BAUGNIET, Gabriel, Classics, Modern BUSTROS, Jean-Claude, Cinema Languages and Linguistics BUTLER, Deidre, Religion BAXTER, Bonnie Jean, Studio Arts BEAUDRY, Adèle E., Studio Arts CABREJO, Pedro, Decision Sciences and BECKMAN, Carolyn, Biology Management Information Systems BELOBABA, Peter, Aviation MBA Program CAMPBELL, David, Exercise Science BELTEMPO, Joseph, Psychology CAMPBELL, Howard John, Management BÉRARD, Michael, Music CAPLAN, Marlene, Sociology and Anthropology BEREZOWSKY, Liliana, Studio Arts CARDUCCI-SIDORENKO, Elaine, Classics, BERGEY, Annie, Études françaises Modern Languages and Linguistics BERJAOUI, Mahmoud, Engineering and CARLEVARIS, Anna, Studio Arts Computer Science CARLEY, Moira, Lonergan University College BERNATCHEZ. Élise. Studio Arts CARPI-LOBATON, Carmen, Classics, Modern BERNIER, Luc, Political Science Languages and Linguistics BERRY, Shawn, Sociology and Anthropology CARRILLO, Miguel Jorge, Management CARROLL, Ann, Journalism BERTRAND, Lucie, Theatre CARUSO, Josie, Classics, Modern Languages BEYROUTI, Patrick, Decision Sciences and Management Information Systems and Linguistics BIDER, Noreen, English CASALE, Giuseppe, Political Science BIELEC, Sylwia, Education CAUVIN, Marie H., Studio Arts BLAIS, Ghislaine, Études françaises CHALIFOUX, Lisa M., Education BLANCHARD, Georgette, Decision Sciences and CHAN MAN FONG, Gisela, History Management Information Systems CHAN, Germaine, Accountancy BLANCO FERNANDEZ, Julia, Classics, Modern CHARRON, Raymond, Communication Studies Languages and Linguistics CHAVERDIAN, Gregory, Music BOGARDI, George, Studio Arts CHECHILE, Michael, Education BOISVERT, Yves, Journalism CHOQUETTE, Michel, English BOLAND-DUCHAMP, Theodora, Art Education CHUPRUN, Ian, Music and Art Therapy CLARINI, Janice, Sociology and Anthropology BOLDUC, Rémi, Music CLARK, Anne, Theatre BONNEAU, Marlene, Religion CLARK, David, Music CLARKE, Jocelyne, Communication Studies BONNEVILLE, Lucie, Psychology BORENSTEIN, Joyce, Cinema CLASSEN, Constance, Sociology and BORSA, Joan M., Art History Anthropology CLEMENT, Samuel B., Psychology BOTA, Myriane, Finance BOTTENBERG, Joanna, Classics, Modern CLOVER, Darlene, Education Languages and Linguistics COHEN, Leslie, Psychology BOTTENBERG, Wolfgang, Music COLALILLO, Lina, Accountancy BOUCHARD, Marie, Études françaises COLAS, Philippe, Marketing BOUCHARD-ULUSOY, Diane, Études françaises COLDEVIN, Gary, Education BOURGIE, Luc, Management COLLINS, Robert, Political Science BRACKEN, Paul, Mathematics and Statistics COLPRON, Franci, Music BRANDL, Eva, Studio Arts CONNELLY, James, Teaching of English as a BRANSWELL, Michael J., Journalism Second Language BRASSARD, Christine, Teaching of English as CONNOLLY, John, Marketing CONTOGIORGIS, Margaret, Classics, Modern a Second Language BRAUER, Aaron, Academic Technology Languages and Linguistics BRAULT, François, Cinema COOK, Iain D., Communication Studies COONEY, Peter, Journalism BRETON, Gabriel R., Psychology BREUER, Robert Elliot, Études françaises CORREA, Elaine, Education BRILLINGER, Margaret F., Education COSSIOS, Susana, Classics, Modern BRIMO, Elizabeth L., Education Languages and Linguistics

COUTURE, Merrianne, Marketing COWAN, Laura, Teaching of English as a Second Language CRAIG, Robert, Cinema CRANTON, Patricia, Education CRICHLOW, Wesley, Sociology and Anthropology CRICHTON, Pearl, Sociology and Anthropology CROZIER, Stephen, Teaching of English as a Second Language CRUICKSHANK, Lyle, Marketing CURRIE, Lesa M., Economics CZAPIEWSKI, Jacek, Design Art DA PALMA, Maria, Economics DAMOVA, Mariana, Computer Science DANINGBURG, Suzanne, Education DANIS, Jean-Claude, Political Science DARDICK, Simon, English DAS, Suporna, Mathematics and Statistics DAS, Susil K., Electrical and Computer Enaineerina DAUBNER, Ernestine, Art History DAVIES, Howard, Design Art DAVIS, Donald, Electrical and Computer Engineering DAVIS, Mary E., Cinema DE AGUAYO, Anna, Sociology and Anthropology DE FREITAS, Jennifer, Design Art DE GRACE, Lynn, Accountancy DE IACO, Gilda, Sociology and Anthropology DE SIMONE, Christina, Education DE TOURREIL, Savithri, Religion DEBIPARSHAD, Nicki, Economics DEGUEE-BERTRAND, Chantal, Études françaises DEHLER, Christina, Education DEL BURGO, Carlos, Études françaises DELISLE, Michèle, Studio Arts DEMERS, Diane, Applied Human Sciences DESJARDINS, David, Economics DESLAURIERS, Pierre, Geography DESLAURIERS, Roch, Études françaises DEWAN, Kumar Aditya, Sociology and Anthropology DI LULLO, Giovanni, Classics, Modern Languages and Linguistics DIAZ-GILEAD, Karen, Education DIEGUEZ, Ina, Classics, Modern Languages and Linguistics DIONNE, Micheline, Études françaises DOERR, Karin, Classics, Modern Languages and Linguistics DONAHUE, John S., Classics, Modern Languages and Linguistics DONG, Bao Min, Economics DORE, Lorraine, English DOUCET BOARD, Anne D., Education DOUGLAS, David, Cinema DOW, Sandra, Finance DOWNES, Wray, Music DOYLE, Maureen, English DROBNICK, Jim, Studio Arts DRYSDALE, John, Sociology and Anthropology DUARTE, Paul, Physics

DUBE, Lakshmi S., Mathematics and Statistics

DUBE, Patrick, Building, Civil and Environmental Engineering DUBINSKY, Lon, Studio Arts DUBOIS, Pauline, Computer Science DUCHSCHERER, Brian, Cinema DUCKWORTH, Martin, Cinema DUDKIEWICZ, Marcy, Psychology DUHAMEL, André, Philosophy DUSSAULT, Marc, Management DUVIEUSART, Bernadette, Études françaises DZIECIOLOWSKI, Krzysztof, Decision Sciences and Management Information Systems EBER, Sandra, Cinema EGAN, Edmund, Philosophy ELALI, Wajeeh, Finance ELEY, David R., Theological Studies ELLIOT, Susan, Music

ENDACOTT, Laura, Studio Arts ENTWISTLE, Harold, Education FARZANEH, Farzin, Cinema FEDER, Peter, English FERRARA, Nadia, Sociology and Anthropology FILIATRAULT, Patrick, Management FILIPPOU, Helen, Classics, Modern Languages and Linquistics FIMA, Sandra, Biology FISET, John W., Education FISHER, Jennifer, Sociology and Anthropology FLEURY, Jocelyne, Music FLOOD-TURNER, Janice, Studio Arts FORD-ROSENTHAL, Heather Angela, Sociology and Anthropology FORGEARD, Dominique, Études françaises FORSYTHE, Christine, Sociology and Anthropology FRAGOULIS, Anastasia Tess, English FRANKLIN, David, Management FRASER, Judith M., Chemistry and Biochemistry FRÉGEAU, Pierre, Political Science FRIEDLAND, Linda J., Music FRIEDMAN, Matthew, Journalism FULTON, Diane, Applied Human Sciences GAGNÉ, Gilbert, Political Science

GAGNON-RIOPEL, Julie, Classics, Modern Languages and Linguistics GALINA, Harry Z., Psychology GALLAGHER, Stephen, Political Science GAMATI, Samia, Building, Civil and Environmental Engineering GAMOY, Bernard, Studio Arts GARON, Jacques, Finance GATENSBY, Anne, Philosophy GAUTHIER, Pierre, Mathematics and Statistics GAUTHIER, Vincent, Cinema GAWARGY, Mumtaz, Electrical and Computer Engineering GDALEVITCH, Ruth, Sociology and Anthropology GERICKE, Irene, Art Education and Art Therapy GERVAIS, Leonard, Journalism GHADERPANAH, Sadegh, Computer Science GHAN, Zelda, Teaching of English as a Second Language

GAGNON, Jean-François, Theatre

GHAYOUR, Rahim, Engineering and Computer Science HOBBS. Peter. Studio Arts GIALLORETO, Louis, Aviation MBA Program HOECKER-DRYSDALE, Susan, Sociology and GIANNOPOULOS, Constantina, Psychology Anthropology GIFFORD, Robert, Art History HOJJATI, Mehdi, Mechanical Engineering GLÜCK, Yaël, Sociology and Anthropology HOLMES, Karla, Teaching of English as a GOLDSTEIN, Jonathan, English Second Language GOMEZ-PERALES, Juan, Studio Arts HOMEL, David, Études françaises GORDON, Russell T., Studio Arts HOOPER, William R., Psychology GOURLAY, Margaret, Communication Studies HORNBY, Laura, Exercise Science GOYETTE, Louis, Cinema HUGHES, Thomas H., Computer Science GRANT, Alyson, Marketing HUM, Donna, Marketing GREEN, Doreen, Political Science HUNTER, Jesse, Teaching of English as a GREENSPAN, Harry, Mathematics and Statistics Second Language GREGA, Glenn, Management HUOT, François, Applied Human Sciences HYJAZIE, Fayez, Electrical and Computer GREGOIRE, Pierre A., Art Education and Art Therapy Engineering GRENIER, Bruno, Engineering and Computer IORDANOVA-MAXIMOV, Marta, Psychology Science GRENIER, Marc, Economics ISLAM, Md Shafiqul, Mathematics and Statistics GUBASH, Milutin, Studio Arts ISLAM, Mohammed, Economics GUEVARA, Alberto, Sociology and Anthropology GUIMONT, Anny, Classics, Modern Languages JABABO, Khaled, Computer Science and Linguistics JAWORSKI, Wojciech M., Computer Science GUTSCHE, Clara, Studio Arts JAY, Dickson, Management JOHNSON, Harlan, Studio Arts HABER, Mark, Marketing JOHNSON, Lise-Ann, Theatre HABIB, Donald, Music JOHNSON, Louise, Cinema HABIB, Henry, Political Science JONES, Francine, Marketing HAGGAR, Janette, Art Education and Art JOURDE, Laurence, Études françaises Therapy JURICEVIC, Robert, Mathematics and Statistics HAGYARD, Trevor, Accountancy HAILPERN, Rosalyn, Teaching of English as a KAHANE, Naomi R., Applied Human Sciences Second Language KAHRIZI, Mojtaba, Electrical and Computer HALE, Mary, Religion Engineering KALMAN, Rica-Judith, English HALL, Budd L., Education HALL, John L., Management KALOGEROPOULOS, Dennis, Psychology HAMEL, Christiane P., Études françaises HAMLET, Zacharias, Chemistry and Biochemistry KASK, Janet, Journalism KASSABIAN, Hagop, Teaching of English as a HANNA, Aiman, Engineering and Computer Second Language Science KEATON, Robert J., Political Science HARDY, Dominic, Art History KEGL, Balazs, Computer Science HARMAT, Heidi, Classics, Modern Languages KENGATHARAM, Thirulogasanthar, Mathematics and Statistics and Linguistics HARNDEN, Bonnie, Art Education and Art KENNEALLY, Michael, English KENYERES, Judith, Education Therapy HARRIS, Michael, English KERMANI, Moin, Decision Sciences and HARRISON, Edelmera, Mathematics and Management Information Systems KES-COSTA, Barbara, Classics, Modern Statistics HARVEY, Louis, Computer Science Languages and Linguistics HASKINS, Heather, Art History KHAN, Saira, Political Science HAUGHEY, Elizabeth, Music KHEDR, Mohamed, Building, Civil and Environmental Engineering HAYS, Matthew, Journalism HE, Zhongzhi, Finance KHORDOC, Karim, Electrical and Computer HECHT, Robert, Accountancy Engineering HEFT, Riva, Education KING, Holly, Studio Arts HENRICKS, Nelson, Studio Arts KINSLOW, Valerie, Music HENRIK, Elizabeth, Psychology KIPLING, Arlin L., Physics HERBISON, Philip, Cinema KIRK, Douglas, Music HERSHORN, Marvin, Political Science KLEIMAN, Larry, Biology HESS, Salinda S., Sociology and Anthropology KLEIN, Tobi, Creative Arts Therapies HIDALGO, Federico, Cinema KLEPKO, John, Music HIGGINS, Ross, Sociology and Anthropology KNUDSEN, Chris, Studio Arts KONSTADATOS, Spiridon, Classics, Modern HILTON, Anthony, Psychology HINA, Manolo Dulva, Computer Science Languages and Linguistics HIRSCHBERG, Jack Jacob, Psychology KOZEL, Vladimir I., Mechanical Engineering

HNATCHUK, James W., Economics

KRATZER, Lynn, Psychology MACLEOD, Katja, Art History KRAUEL, Jerry, Teaching of English as a MADRUGA, Nancy B., Classics, Modern Second Language Languages and Linguistics MAGOR, Susan, Management LABELLE, Paul, Marketing MAGWOOD, Debbie, Applied Human Sciences LACROIX, Louise, Art Education and Art Therapy MAJZELS, Robert, English LAGACÉ, Bernard, Music MALY, Mary P., Biology LAGACÉ, Eric, Music MAMUN, Mahmud, Mathematics and Statistics LAIKEN, Marilyn, Education MANAS, Dan, Physics LAING, Stephen J., Marketing MARELLI, Marie-Paule, Études françaises LAJOIE, Mark, Sociology and Anthropology MARRIE, Stella, Creative Arts Therapies LALONDE, Marc P., Religion MARTEL, Claude, Communication Studies LAMBERT, Michel, Music MARTIN, Annie, Studio Arts LAMONTAGNE, Valerie, Studio Arts MARTIN, Monique, Music LANCTÔT, François, Études françaises MASON, Trudie, Journalism LANCTOT, Micheline, Cinema MASRI, Rajai, Finance LANIEL, Denyse, Études françaises MCAULEY, John, English LANTHIER-O'CONNOR, Sheila, English MCAUSLAND, Andrew, Academic Technology LAPLANTE-L'HÉRAULT, Juliette, Études MCCLORY, Michael, Chemistry and Biochemistry françaises MCDONAGH, Patrick, Engineering and Computer Science LARIN, Lise-Hélène, Studio Arts LAROUCHE, Julie, Psychology MCEVENUE, Kate, English LARUE, Johanne, Cinema MCGIMPSEY, David, English LAU, Hang T., Engineering and Computer MCGRAW, John, Philosophy MCGUIRE, Beverly, Music Science LAURIN-ANCTIL, Céline, Études françaises MCKAY, John, Communication Studies LAUZIÈRE, Abubakr Joël, Études françaises MEARNS, Robert A., Mathematics and Statistics LAWRENCE, Isabelle, Chemistry and MEDICOFF, Mark, Communication Studies Biochemistry MENZIES, Stephen B., Cinema LAWRENCE, P. Scott, English MERHI, Hussein, Sociology and Anthropology LAZAR, Barry, Journalism METSON, Graham, Studio Arts LEB, Danielle, Études françaises MICHEL, David, Marketing MIDDELTON-MOZ, Jane, Applied Human LEBLANC, Lauraine, Simone de Beauvoir Institute Sciences LEBLANC, Suzanne, Art History MIHALKOV, Valery, Cinema LECCA, Doina, Classics, Modern Languages MILKIAS, Paulos, Political Science and Linguistics MILKMAN, Lauretta J., Music LECLERC, Catherine, Études françaises MILLAR, Joyce, Art History LEDOUX, Marie-Stéphane, Contemporary Dance MILLER, Ashley, Studio Arts LEE, Mark, Teaching of English as a Second MILLER, David M., Religion Language MILLER, Joel, Theatre LEEMING, Frances, Communication Studies MIRON, François, Cinema MOAZZAMI, Bakhtiar, Economics LEFEBVRE, Jean-Pierre, Cinema MOGHADDAM, Mahmood K., English LEITH, Linda, English LEONARD, Gordon, Management MONGENOT, Hélène, Études françaises LEPRINCE, Martine, English MONTANO, Rafael, Classics, Modern LEVINE, Warren, Accountancy Languages and Linguistics LIBEROVSKAYA, Katherine, Communication MOORE, D. Catherine, Geography Studies MORISON, Thomas, English LIEBICH, Christine Renée, Études françaises MORRISON, Craig, Music MOSCOVITZ, David, Marketing LIGIER, Françoise, Études françaises LIPPITT, Lawrence, Applied Human Sciences MOWAT, Joanne, Education MUHAMMAD, Wali, Music LIPSKY, Helmut, Music LO, Elsa, Education LOTEY, Andrée, Études françaises NACHFOLGER, Stanley, Political Science LOW, Shelly, Studio Arts NAGUS, Judy-Gail, Education NAKAIDRE, George, Music NAZNEEN, Roksana, Sociology and MAAG, John A., Accountancy MACDONALD, Annabelle, Teaching of English Anthropology NEWELL, Pamela, Contemporary Dance as a Second Language MACDONALD, David, School of Community NICHOLLS. Winston D., Economics and Public Affairs NICKELCHOK, Rick, Exercise Science MACDONALD, Kathleen, Classics, Modern NIELSEN, Kai, Philosophy Languages and Linguistics NISBET, Michael, Engineering and Computer MACKENZIE, Kenneth, Decision Sciences and Science

Management Information Systems

NIXON, Laurence, Religion

NIXON, Virginia, Liberal Arts College NOCHERA-OUIMETTE, Maria-Elena, Classics, Modern Languages and Linguistics NORVID, Adrian, Studio Arts NOWAK, Ted, Accountancy OADES, Lorraine, Studio Arts OBUCHOWICZ, Tadeusz, Electrical and Computer Engineering OHAYON, Kelly, Accountancy OLIVERIO, Joseph, Accountancy OUELLET, Pierre, Political Science OXLEY, Daniel, Studio Arts PAINTER, Patricia, Applied Human Sciences PALMER, Susan, Religion PALMER, Zandra, Cinema PANT, Bhuvan C., Chemistry and Biochemistry PAO-MERCIER, Laura, Sociology and Anthropology PARADIS, Sylvie, Cinema PARRY, Mitch, Cinema PASDERMAJIAN, Penney, Sociology and Anthropology PAULI, Sebastian, Mathematics and Statistics PAYETTE, André, Accountancy PEARCE, Brent, Marketing PELUSO, Maria, Political Science PERRY, Karla, English PESLHERBE, Laurence, Chemistry and Biochemistry PETCOFF, Christine, Etudes françaises PETERS, Kenneth, Studio Arts PICARD, Marc, Teaching of English as a Second Language PIGEON, Elaine, Engineering and Computer Science PILON, Michel, Teaching of English as a Second Language PINSONNEAULT, Michael, Music PLAIN, Odile, Études françaises PLANT, John, Contemporary Dance PLESZEWSKI, Zbigniew, Psychology POCIUS, Gerald, Geography POLLAK, Roland, Cinema PRATT, P. Gerald, Classics, Modern Languages and Linguistics PRESTON, Scott, Cinema PROUD, Ronald, Teaching of English as a Second Language PRUSKA-CARROLL, Marika, Political Science PUIU, Mary Jane, Music PUKTERIS, Sophie, Education

RABBAT, Johanne, *Religion*RADECKI, Brigitte, *Studio Arts*RAE REGAN, Susan, *Education*RAJAN, G. S., *Management*RAJIVA, Vijayalakshmi, *Political Science*RAO TALLA, Malleswara, *Computer Science*RAPPEL, Ron, *Exercise Science*RAUDSEPP, Karl, *Music*RAY, Karen, *Political Science*RAYMOND, Pierre, *Biology*REEVES, Shelley, *Studio Arts*REGLER, Irwin, *Design Art*

REILLY, Rosemary, Applied Human Sciences RENTERIA, Nelly, Classics, Modern Languages and Linguistics REWAKOWICZ, Anna, Studio Arts RHODES, Barbara M. J., Mathematics and Statistics RIBAUX, Sonia, Education RICHARD, Claude, Music RICHARD, Jean-Yves, Études françaises RICHMAN KENNEALLY, Rhona, Design Art RILEY, June, Economics RING, Nancy, Studio Arts RITCHIE, Jeanette, Art Education and Art Therapy RIVARD, Jacques, Études françaises ROBERGE, Laurent T., Studio Arts ROBLOT, Xavier, Engineering and Computer Science RODINOS, Evelyn, Applied Human Sciences ROGERS, Priscilla, Executive MBA Program ROSENBERG, Michael M., Sociology and Anthropology ROSS, Yaron, Music ROSSIN-ARTHIAT, Maurice Fernand, Decision Sciences and Management Information Systems ROTSTEIN, Marc David, Classics, Modern Languages and Linguistics ROURKE, Martin, Education ROWE, Brenda, Simone de Beauvoir Institute ROY, André, Études françaises ROZAHEGY, Mark Pierre, Engineering (Dean) RUDDY, James W., Mathematics and Statistics RUNIONS, Erin, Religion SACK, Joanabbey, Art Education and Art Therapy SACKSNER, Jeffrey H., Management SAHNI, Isher Paul, Sociology and Anthropology SAID, Aminu, Economics SAID, Fady, Computer Science SAID, Joseph, Computer Science SAKS, Robby D., Marketing SAMPERI, Jacqueline, Classics, Modern Languages and Linguistics SAMSON, Louise, Music SANG, Murray, Marketing SANTANA, Carlos-Luis, Computer Science SAUDNY-UNTERBERGER, Helga, Biology SAVOIE, Adrienne, Music SCHUGURENSKY, Daniel, Education SCHUTZE, Bernard, Communication Studies SCHWARTZ, Fred S., Education SCHWARTZ, Gary, Music SCHWARTZ, Sandra, Psychology SCIRETTA, Martine, Classics, Modern Languages and Linguistics SCOTT, David, Decision Sciences and Management Information Systems SCOTT, Susan, Studio Arts SEBBAR, Abdellah, Computer Science SEDGWICK, Katherine, Journalism SEGAL, Marcia, English SELIG, Geoffrey, Decision Sciences and Management Information Systems SELLAR, Gordon, English

SELLARS, Kathleen, Studio Arts TEVEL, Abe, Finance SEN, Debaraj, Mathematics and Statistics THÉBERGE, Jean, Cinema SENTES, Bryan, English THÉRIAULT, Madeleine, Music THERRIEN, Michel-Charles, Design Art SERRUYA, Charlotte, Études françaises SETON SYKES, Anne C., Studio Arts THOMSON, Shannon, Music SEVIGNY, Pierre, Management TIGKOS, Maria, Communication Studies SHALLWANI, Shabnam, Economics TITUS, Kerly, Computer Science SHARP, Marjorie, Management TIWARI, Umanath, Mathematics and Statistics SHAW, Margaret, Sociology and Anthropology TORVI, David, Building, Civil and Environmental SHAYAN, Yousef R., Electrical and Computer Engineering Enaineerina TOTARO, Donato, Cinema SHEHAB ELDEEN, Tariq, Building, Civil and TOURIGNY, Louise, Management Environmental Engineering TREMBLAY, Michel T., Political Science SHEPHERD, Andrea, Journalism TRUCHON, Pascal-Normand, Études françaises SILAS, Mary, Engineering and Computer Science TRUESDALE, Christine, Education SIMMS, Lorraine, Studio Arts TURGEON, Alain, Music SIMON, Karen, Études françaises TURNBULL, Robert, Psychology SIMS, Marilyn, English TURNER, David, Music SINGER, Ken, Decision Sciences and TUROVSKY, Eleonora, Music Management Information Systems TUROVSKY, Yuli, Music SINGH, Shishir, Decision Sciences and TYRRELL, Roger, Cinema Management Information Systems SISTI, Anthony, English ULLMANN, François-René, Études françaises SKLAR, Alissa, Communication Studies SMALRIDGE, Brian, Education VALLADARES-RUIZ, Patricia, Classics, Modern SMITH, Allan, Applied Human Sciences Languages and Linguistics SMITH, Brian R., Psychology VAN VLAARDINGEN, Caroline, Journalism SMITH, Irving, Liberal Arts College VANDYCKE, Jacqueline, Études françaises SMITH, Lynn D., Cinema VARVARIKOS, Maria, Education SMUCKER, Joseph, Sociology and Anthropology VEROFF, Susie, Education SNYDER, Joseph, Psychology VÉRONNEAU, Pierre, Cinema SOLOV, Roumen, Management VERRON, Alain, Études françaises SOMERS, Bertram A., Economics VIEIRA, Monique, Classics, Modern Languages SOROKA, Robert, Marketing and Linguistics SOTIRON, Michael M., Journalism VILLEMURE, Marc, Music SPACAGNA, Giuseppe, Classics, Modern VISENTIN, Patrick, Studio Arts Languages and Linguistics
SPENCE, Alwin C., Psychology VIVIAN, David, Theatre VOIA, Marce-Cristian, Economics ST-LAURENT, Bernard, Journalism VOLLICK, Erin, English STAFFORD, Joan, Applied Human Sciences STANDISH, Kit, Applied Human Sciences WADE, Anne, Education STANDJOFSKI, Harry, Theatre WALKER, Shirley A., Applied Human Sciences STEINSON, Elizabeth H., English WALLACE, Heather, Communication Studies STETSON, Kent, English WALLIS-JOHNSTON, Gillian, Art Education and STEVENS, Laird, English Art Therapy STIRLING, Donald G., Biology WATERS, David, Journalism STOTLAND, Stephen, Psychology WEBB, Edward, Engineering and Computer SUL, Chinsong, Engineering and Computer Science Science WEBER, Ludwig, Management SULLIVAN BROWN, Sheila, Education WEINBERG, Sara, Education SWEET, Frederick, Applied Human Sciences WEINSTEIN, Melissa, English SZABAD-SMYTH, Linda, Art Education and Art WELLS, David, Education Therapy SZAMOSI, Geza, Science College WHITING, Daniel, Studio Arts WIGHT, Nancie, Communication Studies SZIGETVARI, Zsolt, Marketing WILLIS, David A., Sociology and Anthropology SZIRTES, Thomas, Mechanical Engineering WILLMER, Andrew, Theatre SZPILBERG, Anna, Music WILSON, James, English WILSON, Warren, History TAILLEFER, Pierre, Accountancy WINIARZ, John, Music TAMAS, Steven, Accountancy WINIKOFF, Steven M., Computer Science TARDIF, Yves, Management TASSE, Loic, Political Science WONG, Edward, Finance TATLOW, Frederick, Teaching of English as a WONG, Stephen, Finance Second Language WONG, William, Mechanical Engineering TEIXEIRA, Herminio, Political Science WOODCOCK, Laurel, Studio Arts TEOLI, Maria-Luisa, Classics, Modern WOODCOCK, Roland, Mechanical Engineering Languages and Linguistics WOODROW, Anna, Sociology and Anthropology

XU, Lugang, Computer Science ZAJDMAN, Karen, Accountancy ZARINS, Harry J., Exercise Science YAN MILLER, Mindy, Studio Arts YANG, Liqing, Mathematics and Statistics JANOWITZ, Tilly, BA MA Prague, Communication PHILMUS, Robert M., BA Brown, PhD Calif. Retired Full-Time Studies (San Diego), English Faculty McDEVITT, Robert S., Journalism SEN, Joya, BA Calc., MA Jad., MA PhD Tor., MOORE, James W., BA Car., MA Tor., Political Management 1999 Retirements ANDERSON, Perry D., BA MSc W. Ont., PhD KRAUSE, Jerome C., BFA Layton Sch. of Art, 1998 Retirements MFA Cranbrook Acad. of Art, Ore. State, Biology COLEBROOK, Lawrence D., BSc MSc PhD Studio Arts LOSIQUE, Serge, LèsL DES DU Paris, Études Auck., Chemistry and Biochemistry GEDDES, Gary, BA Br. Col., MA PhD Tor., françaises English POTEET, Lewis J., AB Bethany Nazarene, MA GRACOVETSKY, Serge A., Eng(Physics) Okla., PhD Minn., English SBROCCHI, Frank L., MBA W. Ont., PhD C'dia, Lausanne, PhD Br. Col., Electrical and Computer Engineering RIA/CMA, Accountancy HUBBARD, William H., BA Ore., MA PhD Col., TRESIERRA, Julio, BA Catholic, Lima, Peru, MA PhD Notre Dame (Ind.), History KOMODA, Melvin K., BA MA Hawaii, PhD York Sociology and Anthropology (Can.), Psychology WISE, Roy A., BA MA Calif. State, PhD McG., KOVATS, Thomas A., BSc Georgetown, PhD Psychology Johns H., Communication Studies ANAND, Kailash K., BA Punj., MA Delhi, PhD DUBAS, Rev. M. Stephen, s.j., BSc MSc(Eng) 1997 Retirements N.Y., Mathematics and Statistics Alta., PhL PhD St. Louis, MDiv St. M. AUCHINACHIE, Gerald M., BA Br. Col., MA U. Physics Tor., PhD Montr., English DWIVEDI, Tryambkeshwar D., BSc Ban., MSc BALDWIN, Mary E., BSc MSc Tas., SM Harv., Gorak., MSc PhD Ott., Mathematics Chemistry and Biochemistry and Statistics BARTON, Charles R., BA MA Yale, PhD N.Y., EDDY, Nelson W., BA McM., MSc Mass., PhD Linguistics Arizona, Physics ENOS, Edmund F., BSc Conn., MEd EdD BELINSKY, Moishe M., BSc MSc McG., PhD Montr.. Mathematics and Statistics Boston, Exercise Science FINK, Howard R., MA McG., PhD Lond., English BELMORE, Nancy, AB Randolph-Macon, MS PhD Georgetown, TESL (Applied FRIEDLAND, Sherman, BM N.E. Conserv. of Music, MM Mass., Music Linguistics) GABRIEL-LACKI, Christopher, BA Coll. Militaire, BHATNAGAR, Jitendra K., BSc LLB Agra, MA Courtine, Design Art PhD Lond., Education GEORGE, Hardy, BA Texas Christian, MA BOTTENBERG, Wolfgang, BMus Edmonton, Calif., PhD Lond., Art History MMus DMA Cinc., Music GIBSON, Thomas, Studio Arts BRETON, Gabriel, BA Manit., MA Montr., PhD GILSDORF, William, BA Baldwin-Wallace, MA Mich., Psychology BRIAN, Mary A., BA Tor., MA Bryn-Mawr, Bowling Green, PhD Mich., Communication Studies Mathematics and Statistics GINTER, Donald E., BA MA Stan., PhD Calif., BROES, Arthur, BA Manhattan Coll., MA Col., PhD Pitt., English History GORDON, Russell, BFA Temple, MS MFA Wis., BROWN, Daniel, AB Xavier, DPhil Tübingen, Classics Studio Arts CATRY-VERRON, Marthe J., BA Lille, MA Mt. HABIB, Henry P., BA Amer. of Beirut, MA Fordham, PhD McG., Political Holyoke, Etudes françaises CHENG, Richard M.H., BSc Eng H.K., MSc Science Manc., PhD Birm., Mechanical HAMLET, Zacharias, BSc Madr., MSc Agra, PhD Notre Dame, Chemistry and Engineering CRYSLER, Lindsay, Journalism **Biochemistry** DHINDSA, Kuldip S., BSc MSc Panj., PhD HENRIK, Elizabeth, BA MA Sir G. Wms., PhD Tulane, Psychology Helsinki, Biology DRYSDALE, John P., BA Millsaps, MA PhD HERRMANN, Klaus J., BA MA PhD Minn., Louisiana State, Sociology Political Science

YEDID, Marc, Accountancy

YU, Chiu Lun, Computer Science

WORENKLEIN, Abe, Education

WRIGHT, David, English

XU, Bixia, Accountancy

HOECKER-DRYSDALE, E. Susan, BA Northland Coll., Ashland, MA PhD Louisiana State, Sociology HOOPER, W. Ronald, BA PhD Tor., Psychology HUDSON, Susan, Design Art IBRAHIM, Ragai K., BSc Cairo, MSc Alexandria, PhD McG., Biology JAWORSKI, Wojciech M., Inz MTechSc Politechnika Warszawska, DMath Polish Acad. of Sciences, Math Inst. of Warsaw, Computer Science JENKINS, John T., BSc MSc McG., Geology KELLY, Joe, BSc MEd Glas., PhD Strath., Management KIRPALANI, V.H. Manek, BA Bom., MA Oxf., DSc Montr., Marketing, and International Business KREPEC, Tadeusz H., Eng MTSc DTSc Polytech. of Warsaw, Ing, Mechanical Engineering LANGLEY, Elizabeth, Contemporary Dance LEVY, David, LèsL Bordeaux, DES Montr., Doct Illème Cycle Paris, Études françaises L'HÉRAULT, Pierre, BA Laval, BTh Montr., MTh Ott., MA PhD McG., Études françaises MALIK, Mohammad A., MSc Alig., PhD Montr., Mathematics and Statistics MARKLAND, E. Brian, BComm Sir G. Wms., MBA Mich. State, CA, Accountancy MASON, Michael, BA Br. Col., PhD Birm., History MILLER, David M., BA III., BD PhD Harv., Religion MITCHELL, Parker D., BSc MA Dal., PhD Case Western Res., Education MOLINARI, Guido, Studio Arts MORRIS, Stanley P., BSc PhD McG., Physics MUKHERJI, Kalyan K., BSc MSc Calc., Dip Postgrad Leeds, PhD W. Ont.,

NEWSHAM, Gwendolyn S., BA BEd Sask., MEd Alta., PhD Montr., TESL (Applied Linguistics) PARK, Désirée, BA Coll. of William and Mary, MA McG., PhD Indiana, PhD McG., Philosophy PHILMUS, Maria, PhD Ca'Foscari, Venice, English REIDY, Martin, BA Boston Coll., MA PhD Tor., Philosophy RYE, Robin T.B., BA MSc Br. Col., PhD Lond., Chemistry and Biochemistry SCHWELB, Otto, DipEng Bud., PhD McG., Electrical and Computer Engineering SHARP, Marjorie, BA Sir G. Wms., BCL LLB McG., Management SHEPS, G. David, BA Manit., MA Cornell, English SMUCKER, Joseph, BA Bluffton, MA PhD Mich. State, Sociology SORIC, Joseph, BSc MSc McM., Mathematics and Statistics STEVENS, Florence, BA Sir G. Wms., MA C'dia, PhD Genève, Education SUGDEN, Leonard, BA BEd MA Manit., Dd'U Nice, Études françaises TAKAHASHI, Akira, BA Meiji, Tokyo, MA Hawaii, PhD Pitt., Economics TURGEON, Jean C., MS PhD Col., Mathematics and Statistics VALASKAKIS, Gail, BSc Wis., MA Cornell, PhD McG., Communication Studies WILLIAMS, Blair, BA Tor., MA Alta., PhD Car., Political Science ZIENIUS, Raymond H., BSc PhD McG.,

Chemistry and Biochemistry

COLDEVIN, Gary O., BA BEd Sask., MEd PhD

1996 Retirements

ADLEY, Thomas J., BSc Sir G. Wms., PhD DIC Lond., Chemistry and Biochemistry ALLEN, Sr. Prudence, R.S.M., BA Roch., PhD Claremont, Calif., Philosophy ANDRUS, Donald F.P., BA MA Tor., Art History ANTOLIN, Francisco, BA Léon-Oviedo, Spain, LèsL Madrid, MA Mexico, DèsL Madrid, Modern Languages (Spanish) ARNOPOULOS, Paris J., BSc BA Sir G. Wms., MA N.Y., MA Col., Political Science BECKMAN, Carolyn, AA Stockton Coll., Calif.. AB MA Calif., PhD Rutgers, Biology BLACH, Adolf E., BSc MEng Sir G. Wms., PhD Montr., Ing Mechanical Engineering BUCKNER, H. Taylor, BS Louisville, MBA Montr., PhD Calif. (Berkeley), Sociology BUTOVSKY, Mervin, BA Sir G. Wms., MA McG., English CARTER, Sylvia I., BA MA Tor., MEd EdD Mass., Applied Social Science CHARLTON, David E., BSc Durh., PhD Sask., **Physics** COHEN, Philip, BA Sir G. Wms., Dip Conserv.

de Musique du Québec, Music

Geology

Wash., Education COOKE, Edwy, BA Tor., MFA Iowa, Art History COYTE, Ronald C., BA MA Oxf., Political Science CURNEW, G. Robert, BComm Sir G. Wms., MBA Qu., CA, Accountancy DEWES, Mervin, Art Teach Dip Johannesburg Sch. of Art, DipDesign Research St. Martins Sch. of Art, Lond., Painting and Drawing DEWEY, Gerald, BA MA PhD Notre Dame (Ind.), Sociology DINIACOPOULOS, Denis, BA Montr., Communication Studies EGAN, Edmund, BA Manhattan, MA PhD Fordham, Philosophy FARRELL, Mona, BA BEd Montr., MA PhD McG., Education FELDMAN, Dorel, BA PhD lasi, Centre for Building Studies FRANKLIN, Martin H., BA BCL McG., Management GARNET, Paul, BA MA Sheff., PhD McG., Theological Studies

GOLDMAN, Carl, BEng MEng McG., Ing, Civil Engineering

HAMBLIN, F. Douglas, BSc MSc Durh., CEng Sask., Ing, Engineering

HAYES, Frank, BSc Lond., PhD McG., Economics

HILTON, Anthony, BA *Brown*, MA PhD *McM.*, *Psychology*

HOFBECK, Joseph, CES Sorbonne, STL STD Inst. Catholique Paris, Theological Studies

HORWICH, Herbert, BA MA Dal., PhD Montr., Sociology

JACKSON, John D., BA Sir G. Wms., MA PhD Mich. State, Sociology

JAMES, Ellen, BA Penn., MA Col., PhD McG., Art History

JONES, Dennis, *Printmaking and Photography* JOOS, Ernest, BA *Bud.*, MA *McG.*, Lic Phil PhD *Montr.*, *Philosophy*

JORDAN, Albert, MA Oxf., Études françaises KIM, Haydon, BSc MSc Seoul Nat'l., PhD McG., Mathematics and Statistics

KORNBLATT, Jack A., BS Calif., PhD Cinc., Biology

KUMARAPELI, Stephen, BSc Lond., MSc PhD McG., Geology

LADD, Herbert, BSc Vermont, MA PhD Windsor, Psychology

LAFFEY, John F., BA Pitt., PhD Cornell, History LEVY, Claude M., BA Sir G. Wms., MA PhD McG., Liberal Arts College

LIGIER, Marie-Françoise, BA Besançon, LèsL Montr., Études françaises

LIN, Sui, BSc Ordinance Coll., China, MSc(MechEng) PhD Karlsruhe, Ing, Mechanical Engineering

LIPKE, Kathryn, BS N. Dakota State, MA Calif., Sculpture, Ceramics and Fibres

MACALUSO, Joseph A., MA N.Y., Modern Languages (Spanish and Italian)

MacKAY, Barbara E., BA W. Ont., MA N.Y., Theatre

MacKINNON, John A., BSc Qu., MSc PhD McG., Physics

McDONOUGH, Sheila, MA PhD McG., Religion McGRAW, John, BA Notre Dame, PhB PhL Inst. of Phil., Chic., PhD Angelicum, Rome, Philosophy

McNAMARA, Vincent, BA Tor., MA LPh DPhil Laval, Philosophy

McTAVISH, Ronald, BSc Lond., MA PhD Strath., Marketing

MENDELSOHN, Leonard R., BA *Brandeis*, MA *Harv.*, PhD *Wis.*, *English*

MEYERS, Jan, MSc Delft, Holland, Finance

MILLER, F. John, Nat'lDipDes Ealing Coll. of Art, ATD Hornsey Coll. of Art, Lond., Painting and Drawing

MOROZIUK, Russel P., BA MA Ott., BTh LTh Greg., STD Pontif. Inst. of Eastern Ecclesiastical Studies, Rome, Theological Studies

O'BRIEN, John W., MA PhD McG., Economics, Rector Emeritus

OSMAN, M.O.M., BEng Cairo, DrScTech Swiss Fed. Inst. Tech., Ing, Mechanical Engineering

PALLEN, Robert H., BSc Sir G. Wms., MSc PhD W. Ont., Chemistry and Biochemistry

PERRY, Campbell W., BA PhD Syd., Psychology PINSKY, Alfred, Dip Montr. Mus. Fine Arts, Painting and Drawing

PITSILADIS, Peter E., BComm Sir G. Wms., MBA W. Ont., PhD Wash., Management

PRESTON, Eileen M., BA Manc., MA McG., Classics

RAJAN, G.S., BA MA Annam., MS PhD Wis., Management

SASSANO, Giampaolo P., DSc Dottorato *Milan*, PhD *Alta.*, *Geology*

SINGH, Lalita P., BA MA Alld., PhD Delhi PhD A.N.U., Political Science

SMITH, Irving H., BA Sir G. Wms., MA PhD McG., History

SOMMER, Richard J., BA *Minn.*, MA PhD *Harv.*, *English*

SPICER, Malcolm, BA Montr., MA Inst. d'Études Médievales, Montr., MA McG., PhD Ott. PhD(Th) Coll. Dom., Theological Studies

TIFFOU, Maylis, BA Toulouse, DES Montr., Études françaises

TRUCHON, P. Normand, BA Laval, MA McG., Études françaises

WAINWRIGHT, Barry, RCA, DipFA Van. Sch. of Art, Printmaking and Photography

WANG, Yao H., BS National Taiwan, MBA N.Y., MS Stan., PhD Ohio State, Mathematics and Statistics

WAREHAM, Ronald S., BA *R.M.C.*, MA *Mich.*, *English*

WATERS, Katherine E., BA McG., MA Oxf., English

WESTBURY, Ronald A., BSc PhD McG., Chemistry and Biochemistry

YOUNG, James W., BSc Lond., MA Br. Col., PhD McG., Geography

ZAKI, Mohammad, BSc Luck., MSc Alig., PhD Montr., Mathematics and Statistics

1995 Retirements

ADLER, Leonda S., BA Sir G. Wms., MA McG., SM M.I.T., Mathematics and Statistics

ANGEL, Roger B., MA PhD *McG., Philosophy* ANGELL, Harold M., BA *Sir G. Wms.,* MA

McG., Political Science
BEISSEL, Henry E., BPhil Cologne, MA Tor.,
English

BIGELOW, Robert, BFA Chouinard Art Inst., Printmaking and Photography

BOYLE, Lawrence, BA BComm *Montr.*, MA *McG.*, PhD *Maryland*, *Finance*

DE VRIES, Pieter J., BA PhD Alta., Anthropology

ENESCO, Hildegard E., BA Reed, MA PhD Col., Biology

- GUINDON, Hubert, BA BPh PhL MA Ott., Sociology
- HOFFMAN, Stanton de V., AB *Temple*, MA PhD *Penn. State*, *English*
- KUSANO, Kazuo, BA MA PhD Wash., Sociology
- LANDSLEY, Patrick, Dip Winn. Sch. of Art, Dip Montr. Mus. of Fine Arts, Dip Acad. Montmartre, Dip Acad. Ranson, Paris, Painting and Drawing
- LASKEY, Dallas, BA MA New Br., PhD Harv., Philosophy
- NEWELL, Alex, BA MA PhD Pitt., English PATTERSON, Cleveland S., BA MA Camb., MBA PhD McG., Finance
- REZNICEK, William, BA Allegheny Coll., MA Cornell, Theatre
- ROSSNER, Rev. John L., BA *Trin. (Hartford),*MA *Brown,* MDiv *Nashotah,* STM
 McG., PhD Heed, PhD O.I.U.,
 Religion

- SANKAR, Thiagas S., BEng Madr., ME I.I.Sc., PhD Wat., Mechanical Engineering
- SZILASI, Gabor, *Printmaking and Photography* TAGGART, Gilbert C., MA *Colo.,* PhD *Montr.,* Études françaises
- TAYLOR, Nancy D., BA McM., MA PhD McG., Psychology
- WANG, Joseph C., BSME Nat'l. Taiwan, MEng PhD W.Ont., Centre for Building Studies
- WILLS, Roland O., BSc Dal., MBA Windsor, Decision Sciences and Management Information Systems
- XISTRIS, George D., BEng MEng McG., DScA Montr., Ing, Mechanical Engineering

EQUIVALENTS INDEX

FACULTY OF ARTS AND SCIENCE

Curriculum changes in the Faculty will affect some of the entries in the following list. Students should consult with their programme adviser if they already have credits for a course which may be equivalent to another.

Students who have taken a given course under an old number may not repeat it for credit under an equivalent number. NOTE: The use of "C" in the course prefix is discontinued. Unless otherwise indicated, a course previously prefixed with a C is equivalent to the identically numbered one without the C prefix.

NOTE: For old course numbers used prior to 1980-81, see Undergraduate Calendar 1984-85, or consult a programme adviser.

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
Anthropology	281 LESR 281 LESR 393 LEIS C393
202 C211	310 LESR 210
270 370	314 } APSS 313 APSS 413
303 C362	220 J AF33 313 AF33 413
304 }	316 } APSS 463
311 368	220)
311 } 310	319 \ APSS 318 \ APSS 418
312 J	220 J APSS 419 APSS 419
315 { SOCI 313 SOCI 314	323 LESR 398N 330 APSS 331 APSS 431
323 398X	333 LESR 3980
270.)	340 LESR 340
C369	350 LESR 350
401) C469	(APSS 451
102 J	351 APSS 450 { APSS 452
⁴²¹ } 426	355 APSS 455
122 J 123)	360 LESR 360
¹²³ } 459	361 LESR 361
430 498E	371 LESR 371 LESR C250 LEIS C342
431 { 401	380 APSS 490
(402	382 J 381 LESR 381
440 306 461 \ 460	202.)
460	380 J Al 33 490
171 340	383 LESR 481
195 C499	420 APSS 420 APSS C421
	421 LESR 420
Annlied Human Sciences	422 LESR 399A
Applied Human Sciences	427 LESR 427 LEIS C426 431 LESR 431 LEIS C430
APSS 313 APSS 413	432 LESR 432
20.3	436 LESR 464 LEIS C464
APSS 463	440 APSS 440 APSS C441
220 } { APSS 318	444 LESR 336
119	450 LESR 450
225 APSS 415	460 APSS 460
230 APSS 240 APSS C355 APSS C351	485 LESR 485
2327 CAPSS C3567	490 LESR 490 LEIS C490
241 LESR 241 LEIS C241	491 LESR 491 LEIS C491
245 APSS 399E	
253 APSS 353 APSS 453	Biology
254 APSS 354 APSS 454	202 201
256 APSS 356 APSS 456	210 C205
260 LESR 261 LESR 250 LEIS C250	225 298D OR $\begin{cases} 230 \\ 240 \end{cases}$
270 APSS 250	240

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
226 298E OR { 250 270	312 { C310 } C314
234)	C C315 C319
235 C238	$ \begin{cases} 324 \\ 325 \end{cases} $ $ \begin{cases} G322 \\ G322 \end{cases} $
261 C260	C329
266 298C 321 359	327 C328 328 391
330 C231	333 233
334 C237	238
$\binom{337}{238}$ C238 OR $\binom{234}{235}$	$\begin{cases} 338 \\ 339 \end{cases} \qquad \begin{cases} 239 \\ 330 \end{cases}$
338 C238 OR 235 344 246	339 330 337
3461	336 { 335
349 348	435
350 398A	$\begin{cases} 238 \\ 239 \end{cases}$
351 454 354 358, 453	(330
356 458	339 1 337
363 467	341 { C342 C348
366	(372)
383)	$\left\{\begin{array}{cc} 375 & \left\{\begin{array}{cc} 372 \\ 373 \end{array}\right\} & 371 \end{array}$
384 } 333	392 { C390 OR { C390 C390 C390 C390 C390 C390 C390 C390
385 232	392 \ C397 \ C399 \ 435 \ \ \ \ \ \ \ \ \ \ \ \ 336
386	477 479
433 332, 339	478 470
435 336	
437 338	Classics
443 498X 449 349	230 HIST 219 240 HIST 223
451 352	242 HIST 225
458 356	266 C264 HIST C227
459 355, 431 464 498E	267 C265 HIST C229
471 498V	324
483	226.)
	327 C320 CLAS C220
Canadian Studies	341 241 HIST 323 HIST 224 343 243 HIST 327 HIST 226
220 INTE C220* 320 INTE C320*	354)
320 INTE C320* 321 INTE C321*	355 } 254
421 INTE C421*	
422 INTE C422*	Communication Studies
* Prior to 1990-91	320 C205
Observing the and Disaboration	321 C205 322)
Chemistry and Biochemistry	323 C304
218 } 211	324
232 332	JOUR 343 C340 C342
233 334	351 C350
234 { 232 { 332	352
298A	354
$\begin{cases} 331 \\ 298B \end{cases}$	366)
271	367
3/4 C373 C371	JOUR COMS
375 304 C303	446 J C446 453 498M
	100 700W
'	

urse Old Numbers and Equivalents	Course Old Numbers and Equivalents
6442	English
G C442	207 209
C465	212 } 211
↓ ↓	213 J
C466	230 256
	231 262 233 271
C468	234 275
2 398S	235 280
3	243 283
C495	245 385
,	246 395
	247 260
onomics	249 237
See §200.7	270 257
See §200.7	272 258
250	279 306 304
316	285 300 287 290
317	289 248
323	302 393
MAST 234, MATH 251, MATH 282	304
MAST 235, MATH 252, MATH 283	308 C298
351	310 317
398B	311 302
1 398C	311 327
408 C415	313 310, 312
(212	314 5 310, 312 319
{ 411	321 333
DESC 416	322 335
{ 383	323 334
1 498D	325 338
	330 342
cation	331 381 251
It Education (previously Andragogy)	336 352
} C200	337 356 286
	341 307 C297
{ C330 C331	345 392
C340	346 305 349 390
₹ C341	350 459
C343 C342	351 382 248
C342 C343	252.)
105	352 353 C350
495	355 C354
cation	357 287
C392	358 288
C370	360 295
C270	361 296
386	363 301
C381	364 303
C421	365 309 319
,	365 { 363 364
} C430	
,	374 370 { C376 C377
} C441	376 371
ì	377 372
} C470	378 375
C472	391 388
C497	394 389
C498	444 384 C215

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
452 293	FRAN 330 FRAN 266
171 } 478	FRAN 331 FRAN 267
472 \$ 478	FRAN 332 FRAN 264
73 479	FRAN 333 FRAN 269
174 480	FRAN 408 { FRAN 408
80 471	FRAN 405
	FRAN 481 FRAN 381
inglish as a Second Language	FRAN 482 FRAN 382
109)	FRAN 485 FRAN 385 FRAN 488 FRAN 486
09 } C201	FTRA 200 TRAD 200
.10 >	FTRA 201
	FTRA 202 TRAD 202
tudes françaises	FTRA 298 TRAD 298
FLIT 220 FRAN 220	FTRA 299
LIT 230 FRAN 270	FTRA 301 TRAD 301
LIT 240 FRAN 271	FTRA 304 TRAD 304
LIT 298 FRAN 298	FTRA 310 TRAD 310
LIT 300 FRAN 321	FTRA 311 TRAD 311
TLIT 302 FRAN 322	FTRA 398 TRAD 398
LIT 303 FRAN 252 LIT 305 FRAN 253	FTRA 399 TRAD 399
	FTRA 401 TRAD 401
LIT 308 FRAN 364 LIT 310 FRAN 420	FTRA 402 TRAD 402
LIT 310 FRAN 420	FTRA 403 TRAD 403
LIT 312 FRAN 425	FTRA 404 TRAD 404
ELIT 316 FRAN 432	FTRA 405 TRAD 405
EIT 318 FRAN 440	FTRA 406 TRAD 406
LIT 320 FRAN 446	FTRA 408 TRAD 408
EIT 341 FRAN 352	FTRA 409 TRAD 409
EIT 343 FRAN 353	FTRA 410 TRAD 410
FLIT 345 FRAN 356	FTRA 412 TRAD 412
FLIT 347 FRAN 357	FTRA 414 TRAD 414
FLIT 349 FRAN 358	FTRA 416
FLIT 360 FRAN 360	FTRA 420 TRAD 420 FTRA 421
FLIT 362 FRAN 256	FTRA 492 TRAD 492
FLIT 364 FRAN 257	FTRA 498 TRAD 498
FLIT 370 FRAN 370	FTRA 499 TRAD 499
LIT 372 FRAN 371	11100 100 11111111111111111111111111111
LIT 374 FRAN 372	
FLIT 410 FRAN 421	Exercise Science
LIT 412 FRAN 426	207 303
EIT 414 FRAN 431	C215 C216
LIT 416 FRAN 435	215 C315, C316 C413, C415
FLIT 418 { FRAN 438 FRAN 439	C 0200
ELIT 420 FRAN 441	218 308 { C319 C310
LIT 424 FRAN 448	MATH 207
LIT 441 FRAN 450	221 BIOL 222
LIT 443 FRAN 354	PSYC 315
LIT 445 FRAN 453	233 333
LIT 447 FRAN 460	257 353
LIT 449 FRAN 455	262 C337
LIT 450 FRAN 454	263 335
LIT 460 FRAN 462	270 370
LIT 462 FRAN 463	271 470
LIT 471 FRAN 451	272 472
LIT 472 FRAN 476	311 398E
LIT 474 FRAN 477	321 398F
LIT 480 FRAN 479	335 398G
FRAN 494 FRAN 494	336 398H
FLIT 495 FRAN 495	$\left\{\begin{array}{c} 338 \\ 220 \end{array}\right\}$ 336 433
FLIT 496 FRAN 496	339 J
FRAN 307 FRAN 308	348

```
Course
         Old Numbers and Equivalents
                                                            Course
                                                                    Old Numbers and Equivalents
                                                            German
351 . . . . . . . . . . . C451
358 . . . . C453, 456, 457
                                                                                    { 210
211
                                                            200 or 201 or 202
380 . . . . . . . . . . . 403
                         . C402 . . 498F
                                                                                    { 250
251
390 . . . . . . . . . . . . 3981
                                                            240 or 241 or 242
414 . . . . . . . . . . . C317
422 . . . . . . . . . . . 404
                         . C401 . . 498K
438 . . . . . . . . . . . . 339
                                                            History
449 . . . . . . . . . . . 436
                                                            219 ..... CLAS C230
452 ..... 498S
                                                            221 ..... CLAS C231
454 . . . . . . . . . . . C417
                                                            223 ..... CLAS C240
480 ..... 460, 499A
                                                            225 ..... CLAS C242
483 ..... 463, 499B
                                                                    C227
                                                                              CLAS C266, C264
492 . . . . . . . . . . . 491
                                                                    C229
                                                                              CLAS C267, C265
                                                            276 . . . . . . . . . . . . . . . . . 371
                                                            Geography
                                                           302
303
304 }
203 ..... SCHA 254
                                                                      397
204 ..... SCHA 253
                                                            306 . . .
210 . . . . . . . . . 201
                                                                     302, 303, 397, 402, 403
                                                            312
220 . . . . . . . . . 211
                                                           316
318
                                C265
                                                                      324
                                C266
260 . . . . . . . . . . 267
                                                            323 ...
                                                                      224 ... CLAS 341 ... CLAS 241
                                C262
                                                            327
                                                               ..... 226 .... CLAS 343 .... CLAS 243
                        275
276
                                C275
                              { C275
C276
                                                            337 338
270 . . . . . . . . . 271
                                                                      322
275 . . . . . . . . . . C271
                                                            340
341
                                                                      342
276 ..... C271
               { 211
271
                                                            351 }
352 }
                                                                      345
290
                      ..... 275, 276
                                                            359
360 }
                  303 }
                                                                      368
300
                                  305
                                                            375]
312 ..... C412
                                                                      380
                                                            376 }
315 ..... C316
                                                            402 . . . . . . . 302, 397
330 . . . . . . . . . . 331
                                                            403 . . . . . . . 303, 397
342 ..... 398B
347 ..... C341
352 ..... C356
                                                           Interdisciplinary Studies
353 ..... C356
                                                            202 . . . . . LUCC 200, LUCC 202
358 . . . . . . . . . C355
                                                            215 ..... MATH 215
359 . . . . . . . . . C355
                                                            223 . . . . . PHIL 223
               { 361
362
                                                            250 ..... PHIL 220, PHIL 228, SCHA 250
360
                                                            254 . . . . . SCHA 254, URBS 254
375 ..... 475
                                                            283 . . . . . HIST 283
376 ..... 371
                                                            290 ..... INTE 298A
377 ..... 372
                                                            292 ..... INTE 298B
378 . . . . . . . . . . . 373
                                                            293 ..... INTE 298B
403 . . . . . . . . . . 405
                                                            296 ..... INTE 298S
406 . . . . . . . . . . . 306
                                                            333 ..... INTE 499A, LUCC 333, LUCC 499A
433 . . . . . . . . . C401
                                                            410 ..... LUCC 410
438 ..... URBS 488
                                                            440 ..... INTE 400 ..... LUCC 400
458 ..... 498K
                                                            441 ..... LUCC 440, LUCC 441
              { 372
498Z.
472
                        . . GEOL 498C
474 . . . . . . . . . . 498R
                                                            Italian
491 ..... URBS 491
                                                                                      210
                                                            200 or 201 or 202
                                                                                    1 211
                                                                                    { 250
251
                                                            240 or 241 or 242
Geology
                                                            253
254
224 ..... C215
                                                                                      252
231 . . . . . . . . . C221
                                                            256
257
232 ..... C223
                                                                                      255
331 ..... C310
                                                            301 ]
332 ..... C317 .... C412
                                                                        300
                                                            302 ]
415 ..... C315
                                                           306 }
                                                                        305
417 ..... C416 ..... C412
```

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
310 400	ACTU 357 MATH 427
311 401	ACTU 457 MATH 428
366 360	ACTU 486 MATH 429
432 } 431	MAST 217 MATH 216, COMP 238
433)	MAST 218 MATH 262
437 405	MAST 219 MATH 263
${442 \atop 443}$ 440	MAST 221 MATH 242
110)	MAST 223 MATH 337
	MAST 224 MATH 231
Journalism	MAST 234 MATH 251, MATH 282, ECON 325
203 306	MAST 235 MATH 252, MATH 283
210 C305	MAST 330 MATH 271
302 C300; C301 303 C301	MAST 332 MATH 232, COMP 367, COMP 467
309 410	MAST 333 MATH 243
310 C405	MAST 334 MATH 311
315 446 COMS C446	MAST 335 MATH 225
COMS C340	MATH 209 MATH 203
343 COMS C342	MATH 211 MATH 205
COMS C343	MATH 242 MATH 241
400 C401	MATH 243 J MATH 362 MATH 362
402 C402	MATH 244 MATH 362 MATH 245 MATH 363
419 498J	MATH 251 MATH 282, MAST 234, ECON 325
	MATH 252 MATH 283, MAST 235
Liberal Arts College	MATH 262) MATH 261
295 396 } 294 394 } 293	MATH 227)
397 493 392	MATH 427) WATH C325
	MATH C331 MATH 337
Library Studies	MATH 437 MATH C431
$\begin{cases} 201 \\ 202 \end{cases}$	MATH 344 MATH 262
222	MATH 345 MATH 263
323 \ \ 324 \ \ 330	MATH 348 MATH C344
$\begin{cases} 331 \\ 345 \end{cases}$	MATH 352 MATH 381
355 { 331 345	MATH 354 MATH 311
(343	MATH 361 MATH 231
433 C333	MATH 369 MATH 393
	MATH 370 MATH 271
Linguistics	MATH 387 MATH 232
310 C210	MATH 464 MATH C461
311 C211	MATH 470 MATH 394
312 410	MATH 471 MATH 491
372 C370, C371	MATH 472 MATH 492
400 401 }	MATH 474 MATH 373
441 SPAN 665	MATH 475 MATH 379
451 ARAB 451	MATH 478 MATH 436
101 /101B 101	MATH 496 MATH C499
	STAT 249 MATH 242
Lonergan University College	STAT 250 MATH 243
202 LUCC 200, INTE 202	STAT 287 MATH 329
333 LUCC 499A, INTE 333, INTE 499A 410 INTE 410	STAT 342 MATH 342
440 LUCC 400	STAT 343 MATH 343
441 LUCC 400, LUCC 440, INTE 400, INTE 441	STAT 347 MATH 347
2000, 2000,	STAT 349 MATH 337, MATH 351
	STAT 360 MATH 348
Mathematics and Statistics	STAT 388 MATH 232
ACTU 256 MATH 326	STAT 449 MATH 451
ACTU 257 MATH 327	STAT 450 MATH 454, MATH C345
ACTU 286 MATH 229	STAT 452 MATH 353
ACTO 200 WATH 229	31A1 402 WATH 303

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
- Our Country of the Equivalence	Course Cia Nambero ana Equivalente
STAT 460 MATH 443	487 467
STAT 460 MATH 443	488 468
STAT 480 MATH 445	489 449
31A1 400 WA111 443	100 110
	-
Philosophy	Physics
210 223	245 243
212 224	
214 321	292 397
220 PHIL 228, INTE 250, SCHA 250 225 326	346 344
232 241	352 252
234 242	353 354
235 248	458 456
250 240	494 495
252 230	
260 } 370	Political Science
2017	(201)
266 246	$\{\begin{array}{cc} 202 & \{\begin{array}{cc} 201 \\ 203 \end{array}\} & 200 \end{array}$
270 211	$\left\{\begin{array}{cc} 232\\ 234 \end{array}\right\}$ 250
314 323	(234 J
315 321	$ 205 \qquad \left\{ \begin{array}{c} 207 \\ 208 \end{array} \right\} \qquad 210 $
319 350 324 346	206 271
326 338	211 353
327 354	307 317
330 362	309 275
232.)	310 327
333 } 331	314 316 } 334
339 353	319 233
343 357	324 231
345 358	326 314
355 348 356 349	328 316
359 349	330 260
260.)	336 340
361 473	338 412 { C411 C413
362 C462	344 230
363 453	349 336
365 454	332)
366 351	$\begin{cases} 241 \\ 243 \end{cases}$ 240 350
370 310 371 247	364 273
376 313	(3/13
377)	300 (345
378 376	368 472
384 334	372 { 383
385 335	474
386 312	$\frac{376}{379}$ 374
389 347	378 J 376 346
414 422	379 \ 348
420 422 421	380 360
425 426	382 } 372
439 455	383 J 372 384 370
453 460	392 376
460 C360	393 378
466 457	394 385
467)	422 359 451
469 C469	423 417
470 410	424 431
473 412	433 470
474 417	435 475

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
38 453	339 358
80 462	340 320
81 432	342 321
82 434	347 318
84 437 436	348 325
	349 316 C312
	350 314
Psychology	364 315
80 C391	375 363
81 C392	376 343
18 384	378 370
²²]	
23 } 339	379 C465
24 7	380 335
25 398B	397 354
26) 226	403 362
27 \$ 330	410 C499
31	
32 } 333	Science and Human Affairs
34 J	203 254
335 3981	204 253
¹⁴³ 342	
46)	'
$\binom{70}{47}$ 345	253 URBS C253
49 } 348	254 URBS C254, INTE 254
50 J	$\left\{\begin{array}{c} 353 \\ -54 \end{array}\right\}$ 451
$\binom{52}{52}$ 351	354)
53 } 537	355 450
58 360	356 J 450
363	
363	Simone de Beauvoir Institute
357	WSDB 290 WMNS 290, WMNS C290,
1 360 257	WSDB 291 WMNS 291, WMNS C291,
$\begin{cases} 357 \\ 360 \end{cases}$	WSDB 298 WMNS 298
C 357	
67 { 360	WSDB 299 WMNS 299
68 390	WSDB 370 WMNS 370
$\binom{70}{72}$ 330	WSDB 380, 480 WSDB 394
73 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	WSDB 381 WSDB 398B
79 C391	WSDB 382 WSDB 398F
⁸⁵ } 375	WSDB 383 WSDB 398M
00 J	WSDB 390 WMNS C393
91 390	WSDB 393 WMNS 394
92 93 } 364	WSDB 394 WMNS 393
95 393	WSDB 398 WMNS 398
06.)	WSDB 399 WMNS 399
³⁰ } 366	WSDB 490 WMNS 492
21 420	WSDB 491 WMNS 493
22 420	WSDB 492 WMNS 490
36 438	WSDB 493 WMNS 491
39 437	WSDB 498 WMNS 498, WMNS C491, C492,
	WSDB 499 WMNS 499
eligion	
01 { HEBR 210	Sociology
C HEBR 211	203 C200
02 { HEBR 250	212 210
TEDR 201	213 5
10	244 344
12 332	262 \
317 374	262 C260
336 352 C329	275 370
338 357	276 372

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
277 377	433 C479
$ \left\{\begin{array}{c} 313\\ 314 \end{array}\right\} \qquad C312 $	485 C C482 C483
327)	C484
220)	
429 \$ 6340	Theological Studies
333 C435 336)	202 222
337 }	203 310 204 350
338 339 C337	206 421
342 343	210 { 331
355 ANTH 355 361)	332 347
362 }	216
366 367 } 368	219 (221
374 C426	$ 222 \qquad \left\{ \begin{array}{c} 300 \\ 310 \end{array} \right. $
376 270	234 372
378 272 402)	242 241
403 }	265 264 270 (471
406 407 C405	$\frac{471}{472}$
40g \$ 402	303 300
403 437 337	320 423 322 425
445 345	331 430
457 357	331) 240 220
474 374	332) 210 330 332 442
Spanish	334 440
Spanish	336 434
200 01 201 01 202	340 370
240 or 241 or 242	$351 \dots 390 \qquad \left\{ \begin{array}{l} 456 \\ 457 \end{array} \right.$
256 257 } 255	362 { 444 462
306 \ 305	366 466
307)	$ \begin{array}{ccc} 369 & \left\{ \begin{array}{c} 468 \\ 469 \end{array} \right. \end{array} $
363 }	₃₈₄
365	(385
406 407	307 (386
412 413	452 { 453 454
421 422 } 431	493 491
423 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	494 492
424)	
442 }	Urban Studies
451 450	$\binom{230}{240}$ URBS 280
Teaching English as a Second Language	250) GEOG 299U
	260 J URBS 290
324 { C322 C323 C323	333 { URBS 334 GEOG 399U
330 430 498B 331 232	438
C382	{ GEOG 438
385 C 383	
C384 (C411	Women's Studies
C412	(See Simone de Beauvoir Institute)
424 { C422 C423	

FACULTY OF COMMERCE AND ADMINISTRATION

NOTE A The use of this note after certain course descriptions indicates that there exists an equivalent course and the students who have credits for this equivalent course may not take the listed course for credits. To find out the equivalents to the listed course refer to the index below.

NOTE C The use of this note after a course description indicates that with the permission of the Department a student may take the listed course twice for credits provided that a different subject is dealt with the second time.

Course Old Numbers and Equivalents						Cour	se O	ld Numb	ers and Equivalents	
Accou	untanc	•		0.455					Psych C315	
217	214	N214	211	315B, 300 { 411A/B, 400	0	243		N243	Psych C315 242 Econ C221 Math 241 Stat 242	308Z
	(420)			402					Math 241	
220 221	(120) (121)			320Z 320Z						
	213	N213	211	313A/B, 300)	244		N244	{ 242 Econ C222} 30	87
240	218	N216	{ Man 411 } Fin 416	413B, 402			6 313		Stat 242	
310 320	323 326	N313	411	415B, 400		250	314			
330	303	C403	N421	503A	421	253	315		QUAN 353	
340	441	N441	${Com \atop Law 441}$	513A/B, 504		313		N313	{ 411 QA 411 } 518Z	<u>,</u>
350	414	N215 N315	Man 411 }	511B	425	314		N314	c 444 >	<u>,</u>
400	461	N461		509A, 507B	1	325	MANA	345	CQA4II)	
407			407	507B		350	365			
420	335	C325	N314 412	419B, 408		353		N353	Math 415	
429		N432	431	∫ 517B, 508	432	354		N354	Math 415	
	422			1 519B, 508)	361	316			
430 440	422 442	N422		515B, 504		362	412			
450	432		N433	431	433	371	345			
100	102	((Computer	101	100	375	448			
451		N451	Auditing New			378 381	444 323			
400		J	Name)			382	327			
468		Intl Bus		5007		384	486	427		
470 490	471		470 471	560Z 560Z		385	493	417		
490	4/1		471	300Z		386	483	422		
						425	452			
	nistrati					445		N445	442	
201	(101)	N201		312Z		446	440	N446	442	
202	(102)	N202	0050	312Z		451	416	NIAAE	440	
350		MARK	C350	515Z		464 466	415 414	N415	412	
						477	447			
			d Managemer	nt		481	424	N424	421	
Inforn	nation	Systems [*]				482	425	N425	422	
*NOT	E.	The 'OU	ΔN' designatio	n has been cl	hanged to	484	383	423	N423 42	1
11011		'DESC'.	niv ucsiyilallu	ıı ılas DEEII CI	iangeu iu	485	421			
			Quantitative M	ethods		490	433	N433		
222	221	,				492	426	N426	422	

Cour	se	Old Numbers and Equivalents				Course		Old Nu	mbe	ers and Equiv	ralents	
Facu	lty of (`ommerce an	nd Administ	ration — COMM	Courses	315					415B, 414	
215	ity or c	DESC 243	ia Administr		Oourses	340		N340	430)	7100, 717	
217		ACCO 213				341		N341				
222		MANA 340				343	441	11011	100			
224		MARK 213 8	R 350			345		N345	421		470Z	
225		DESC 250	2 000			346		N346			470Z	
301		DESC 222				362	462	N462				
305		ACCO 218				364	464					
308		FINA 214 &	315			365	465					
310		MANA 460				368		N368	451		503B	
315		MANA 475				369		N369	451			
410		MANA 450				401					501A	
						405					505B	
						407					507A	
Finaı						409					509B	
214	314					460		N460			511B	
	215	N215	315, 413	407/A/B, 408		461		N461				
314		N314	413	409B, 408	215	463		N463				
315		N315	413		314	464		N464				
320	424					465		N465				
330	430	N430	424			466		N466				
350	491	1.45	0.407					Intl Bu		C466		
370	467	Int Bus	C467	5.44D		467		N467			5007	
380	440	N440	423, 426	541B		475 476		N475			502Z	
390	460	N460	429			476		N476	211		502Z	
400 401	441	N441 N417	423, 426			499				;	560Z	
402	417 420	IN 4 I /										
410 410	452	N450	423, 427	530Z		Marke	otina					
411	453	N450 N450	423, 427	530Z		201	213 8	2 350				
412	419	11700	720	3002			2100		ſ	211, 411		
418	110	N418				213		N213	1	211, 411, 421	419A/B, 320	
450	491	14110							r	211, 411,		
455			427			350		N350	{	421	421B, 320	
470	467	Int Bus	C467			351		ADMI	•	C350,	515	
	461	N461	429			402		N402			451	551B
	431	N431	424			405	352	N352		431		
-	- *	-				452		N342		412,	451	
									ſ	221, 222,]		EOOD
/lana	ageme	nt				453		N453	ĺ	431		523B
	-	(Com Law			454		N454		414,	461	521A
11		N211 {	211			462		Intl Bu	S	C462		
110		NO40	Psyc 011	Dava Cana		463		N463		481		
213		N213 {	211	Psyc C200		464		N464				
	214	N214 \	Soc 211			465		Intl Bu	S	C465		
	215	N215 🕽				485		N485				
266			466			491		N491				
313				413A/B, 414		495	490	N490				

FACULTY OF FINE ARTS

NOTE A

The use of this note after certain course descriptions indicates that there exists an equivalent course and the students who have credits for this equivalent course may not take the listed course for credits.

Equivalences prior to 1977-78 are not listed below. For courses with indicated equivalences which are not listed below consult either the Department Office, the Office of Student Affairs, Faculty of Fine Arts or the Office of the Registrar.

NOTE C

The use of this note after a course description indicates that the course may be repeated for credit. However, either the number or the letter preceding the number must differ.

Course Old Numbers and Equivalents	Course Old Numbers and Equivalents
Art History	Cinema
ARTH 260 ARTH 220	FMAN 202 FMAN 312, CINE C312
ARTH 262 ARTH 347	FMAN 214 FMAN 314
ARTH 263 ARTH 348	FMAN 303 FMAN 302, 313, CINE C313
ARTH 264 ARTH 320	FMAN 304 7
ARTH 266 ARTH 322	FMAN 316 FMAN 498E
ARTH 267 ARTH 234, C234	FMAN 319 FMAN 498B
ARTH 268 ARTH 234	FMAN 352 FMAN 498H
ARTH 284 ARTH 280, 281	FMAN 402 FMAN 414, CINE C414
ARTH 290 ARTH 210	FMAN 446, 447 FMAN 445, CINE C436
ARTH 350 ARTH 320	FMAN 448 CINE C428 FMAN 449 CINE C429
ARTH 352 ARTH 322	FMPR 231 CINE C311
ARTH 360 ARTH 339	FMPR 332 CINE C411
ARTH 361 ARTH 339	FMPR 334 CINE C334
ARTH 362 ARTH 440	FMPR 335 CINE C335
ARTH 363 ARTH 441	FMPR 337 CINE C437
ARTH 364 ARTH 342, 442	FMPR 339 CINE C433
ARTH 365 ARTH 443	FMPR 341 CINE C333
ARTH 366 ARTH 343	FMPR 344 } FMPR 336
ARTH 367 ARTH 455	FMPR 345 7
ARTH 368 ARTH 459	FMPR 350 FMPR 498F
ARTH 369 ARTH 458	FMPR 432 CINE C412 FMPR 438 CINE C438
ARTH 370 ARTH 244, C444	FMPR 438 GINE C438 FMPR 442 FMPR 498C
ARTH 371 ARTH 425	FMPR 446, 447 FMPR 445, CINE C436
ARTH 373 ARTH 427	FMPR 448 CINE C428
ARTH 388 ARTH 282	FMPR 449 CINE C429
ARTH 397 ARTH 410	FMST 200 CINE C200
	FMST 211 CINE C211
ARTH 400 ARTH 484	FMST 212 CINE C212
ARTH 401 ARTH 495	FMST 214 FMST 314, CINE C426
ARTH 402 ARTH 415	FMST 215 FMST 315, CINE C427
ARTH 434 ARTH 267, C234	FMST 217 FMST 398H
ARTH 499 ARTH 480	FMST 321 CINE C321

		T	
Course Old	Numbers and Equivalents	Course Old	Numbers and Equivalents
	100000000000000000000000000000000000000		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
FMST 322	CINE C322	INMS 450	
FMST 323	CINE C323	INMS 460	CMUS 420 CMUS C421, C422
FMST 325	FMST 498H		CMUS 200 CMUS 498G, 498H
FMST 329		JAZZ 301	
FMST 331	FMST 498E	JAZZ 302	INMS 332
FMST 335	FMST 398	JAZZ 305	
FMST 343	FMST 498B	JAZZ 401	
FMST 422		JAZZ 402	INMS 432
FMST 423	CINE C423	JAZZ 405	CMUS 430
FMST 425		JPER 220	CMUS 300
	FMST 425, CINE C436	JPER 321	CMUS 401
FMST 428	CINE C428	JPER 330	MPER 330
FMST 429	CINE C429	JPER 341	MPER 498L
		JPER 421	CMUS 402
0		JPER 430	
Contemporary Dai		JPER 441	MPER 498O
DANC 220	DANC 220, C200	MHIS 311	
		MHIS 312	
Design Art			MPER 200 MPER C201
DART 200	DESI 200. C200		MPER 220, 221 MPER C201
DART 202		MPER 301	MPER 300, 498 MPER C301
DART 203		MPER 331	
DART 210		MPER 332	MPER 320, 498
DART 300			MPER C431, C432
DART 310		MPER 390	
DART 400			MPER 400, 498
DART 422		MPER 431	
DART 426			MPER 420, 498
DART 424	DESI 424		MPER C433, C434
DART 425		MPER 490	
DART 440	DESI 440	MPER 498A	MPER 431
DART 499	GDES 499		
		Painting and Dra	nwin a
		_	<u> </u>
Faculty of Fine Ar		ART 261 ART 417	
FFAR 250			ART C420 ARTH 267, C234
FFAR 251		DRAW 470	
FFAR 252		PTNG 430	
FFAR 390	FFAR 399G	PTNG 440	
		PTNG 440 PTNG 470	
Interdisciplinary S	tudies	1 1110 470	AIN 0430
IDYS 200			
IDYS 300		Photography	
IDYS 491			PHOT C201, C301
IDYS 492		PHOT 311, 312	
1010 102	11101 002	PHOT 321, 322	
		·	
Music			
EAMT 205		Print Media	
EAMT 305			PRIN 210 PRIN C200
EAMT 350			PRIN 220 PRIN C200
EAMT 406			PRIN 230 PRIN C200
EAMT 407		PRIN 241	
EAMT 451, 452		PRIN 310	
	MUSI 210 MUSI C221, C222	PRIN 320	
	INMS C321, C322	PRIN 330	
INMS 350		PRIN 361	
	CMUS 320 CMUS C321, C322	PRIN 450	
INMS 410	INMS C411	PRIN 470	ART C436

Course	Old Numbers and Equivalents	Course Old Numbers and Equivalents		
Sculpture,	Ceramics and Fibres	DFTT 414	∫ SCEN 411, C410,	
CERA 230	CAFT C310, C230	DF11414	C400, C420	
CERA 330	CAFT 330	DFTT 451,	452 DFTT 450	
CERA 430	CAFT 430		SCEN 498	
CERA 450	∫ CAFT C450		DINE C410	
OLIVA 430	UART C436		PROD C200, C201	
FBRS 240	CAFT C240		PROD C302	
FBRS 260	CAFT C260		PROD 308	
	CAFT C340		PROD 309	
	CAFT C360		PROD C402	
	FBRS 470, ART C440	THEA 211		
FBRS 440	CAFT C440	PROD 211	,	
FBRS 450	CAFT C450		THEA C200, C281	
	U ART C436		THEA 300, C300	
	CAFT C460		THEA 403 THEA C320	
	FBRS 460 or FBRS 440	-	THEA C320	
SCUL 450	ART C436		THEA 304 THEA 300, C300	
			TPER C305	
			TPER C405	
Theatre			TPER C402	
DFHD 209	F 1)1NF 200		TPER 201, 202	
DFHD 210	,		TPER C204	
	DINE 302		302 TPER 300 TPER 223, 224, 306 & 307	
	DINE 303 DINE 202		TPER 213	
	DINE 498F	TPER 323	TPER 214	
	DINE 412 or 413	TPER 324	TPER 313	
	DINE 405	TPER 325	TPER 411	
	DINE 415		TPER 413 TPER C406, C402	
DFTT 209			TPER 215 TPER C203	
DFTT 209			TPER 315	
	SCEN 305	TPER 401,	402 TPER 400 TPER 223, 224, 306 & 307	
	SCEN 302, C310			
	SCEN 302, C310	Women an	d the Fine Arts	
	SCEN 306		FFAR 320, 399A	
	SCEN 307		FFAR 420	
וום וום	JOLIN JUI	VVI AIX 720	11/11\ 740	

Industrial Engineering

INDU 323 ... ENGR 412 INDU 412 ... INDU 310 INDU 471 ... INDU 371 INDU 490 ... INDU 480

FACULTY OF ENGINEERING AND COMPUTER SCIENCE

NOTE:

For old course numbers used prior to 1986-87 see Undergraduate Calendar 1985-86.

NOTE:

The use of "C" in the course prefix is discontinued. Unless otherwise indicated below, a course previously with a C prefix is equivalent to the identically numbered one without the C prefix.

Course Old Numbers and Equivalents Course Old Numbers and Equivalents Mechanical Engineering Engineering MECH 211 ENGR 211 & MECH 211 ENGR 211 ENGR 212 ENGR 342 ENGR C341 MECH 343 MECH 341 & 342 ENGR 343 CIVI C354 MECH 361 ENGR 362 ENGR 344 & 345 CIVI C353 MECH 372 ELEC 318 ENGR 370 ENGR 274 & ELEC 341 MECH 490 ENGR 481 ENGR 401 ENGR 403 ENGR 451 CIVI C491 ENGR 452 CIVI C452 **Computer Science** ENGR 455 CIVI C455 COMP 220 . COMP 224 & 285 . COMP C221 COMP 228 COMP 220 COMP 238 COMP 231 **Engineering & Computer Science** COMP 245 . COMP 244 & 291 . COMP C241 ENCS 245 ENGR C245 COMP 248 COMP 215 COMP 249 COMP 245 ENCS 281 ENGR C281 COMP 292 COMP C251 COMP 294 COMP 391 COMP 295 COMP 392 **Engineering Mathematics** EMAT 332 & ELEC 361 EMAT 312 COMP 296 COMP 393 COMP 297 COMP 394 COMP 325 & 386 COMP C325 & C426 **Computer Engineering** COMP 326 COMP C322 COEN 241 COMP 244 COMP 327 . COMP 325 & 385 . COMP C443 COEN 242 COMP 291 COMP 343 & 385 COMP C443 COEN 243 COEN 240 & 241 COMP 353 COMP C453 COMP 392 COMP C341 COEN 311 COEN C411 COEN 312 COEN C413 COMP 423 & 485 COMP C423 COMP 427 & 486 COMP C427 COMP 446 COMP 423 **Electrical Engineering** COMP 467 COMP 437 ELEC 498 ELEC C482 EMAT 332 & ELEC 361 EMAT 312

200.7 CREDIT FOR COURSES WITH STATISTICAL CONTENT

Some courses in statistics offered by Departments in the Faculties of Arts and Science, and Commerce and Administration have common elements, but are not necessarily equivalent. A hierarchical order has therefore been established. The possible substitution of courses for each other proceeds from top to bottom of Figure 1.

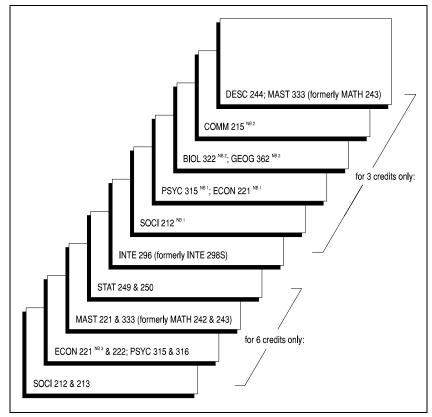


Figure 1

- NB 1: Students transferring to programmes in Economics, Psychology or Sociology may substitute an equivalent or higher level course for ECON 221, PSYC 315 or SOCI 212 respectively.
- NB 2: Students who have completed ECON 222 or PSYC 316 and transfer to programmes requiring COMM 215, BIOL 322 or GEOG 362 will be exempted from these courses and may not take them for credit.
- NB 3: Students who have completed SOCI 212 and 213 and transfer to Economics programme will be exempted from ECON 221 and may not take this course for credit.

No course may be substituted for any course which appears in a box above it in Figure 1.

Any six-credit pair of statistics courses may be substituted for any other six-credit pair which is shown in the same box or in a box which is beneath it in Figure 1.

Any six-credit pair of statistics courses may be substituted for any three-credit introductory statistics course.

Any three-credit statistics course may be substituted for any course which is shown in the same box, or in a box which is beneath it in Figure 1.

No more than six credits will be awarded among the six-credit pairs, and no more than three credits will be awarded among the three-credit courses.

AWARDS, PRIZES AND SCHOLARSHIPS

00.1	CONCORDIA ENTRANCE SCHOLARSHIPS
00.2	ENTRANCE SCHOLARSHIPS
00.3	CONCORDIA UNIVERSITY IN-COURSE SCHOLARSHIPS
00.4	CONCORDIA UNIVERSITY COLLEGE SCHOLARSHIPS
00.5	AWARDS AND PRIZES
00.6	ENTRANCE BURSARIES
00.7	CONCORDIA LINIVERSITY IN-COURSE BURSARIES

AWARDS, PRIZES AND SCHOLARSHIPS

NOTE: Unless the award is followed by an asterisk (*), no application is required.

300.1 CONCORDIA UNIVERSITY ENTRANCE SCHOLARSHIPS

Concordia University Entrance Scholarships: A number of scholarships are available to students entering their first year of full-time study. These non-renewable \$2,000 scholarships are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent. Some Fine Arts departments may select Entrance Scholarships on the basis of portfolios, auditions or interviews. Students are advised that all Entrance Scholars must be enrolled in a full course load (30 credits) for the academic year. Students should contact the Financial Aid and Awards Office before any changes in course load are implemented in order to ensure the receipt of their scholarship.

All students who submit an application for admission to Concordia University by March 1 for the Fall Term and November 1 for the Winter Term will be considered automatically for an Entrance Scholarship. Only those students offered an Entrance Scholarship will be notified.

Concordia University Mature Students Entrance Scholarships: Intended for students admitted to the University as Mature students. Applications are accepted from students who have successfully completed at least 18 credits, but no more than 30 credits at Concordia University. These nonrenewable scholarships are valued at \$2,000 per year. For students who have met the minimum credit requirement, the deadline is August 1 for consideration in the Fall Term and November 15 for consideration in the Winter Term. All scholarship recipients must maintain a full course load (30 credits) for the academic year.

Concordia University Memorial Endowment Entrance Scholarships: Established through the generosity of individuals and organizations to honour Professors Matthew Douglass, Michael Hogben, Jaan Saber and Phoivos Ziogas. The Memorial Endowment provides for four annual Entrance Scholarships. These non-renewable scholarships are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent. Some Fine Arts departments may select Entrance Scholarships on the basis of portfolios, auditions or interviews. All Entrance Scholars must be enrolled in a full course load (30 credits) for the academic year.

Concordia University Senior Students Scholarships: Awarded to students 60 years of age or over. Applications are available at the Financial Aid and Awards Office, and must be returned by August 1. These scholarships have a value of \$500 each per academic year, and are renewable for a maximum of four subsequent years, providing the renewal requirements are met.

Concordia University Shuffle Entrance Scholarships: Established through the participation and generosity of the University community and friends of the University. The Concordia Shuffle consists of a fund-raising "Walk-a-Thon" each year between the Sir George Williams and Loyola Campuses of Concordia University. A number of Entrance Scholarships are awarded to students entering their first year of full-time study. The recipients will be selected on the basis of academic achievement during the first three semesters of cégep or equivalent. Mature students may be considered after having successfully completed at least 18 credits, but no more than 30 credits at Concordia University. Some Fine Arts departments may select Entrance Scholarships on the basis of portfolios, auditions or interviews. These awards are open to full-time undergraduate students in any faculty, including International students. Part-time disabled students are also eligible for these awards. Application forms are available from the Financial Aid and Awards Office and must be returned by August 1.

300.2 **ENTRANCE SCHOLARSHIPS**

Associates of Concordia, Alex C. Duff Scholarship: Established in 1995 by the Associates of Concordia University on the occasion of the organization's dissolution and in memory of Alex C. Duff, a founding member. Eligibility: Open to all deserving undergraduate students without restriction to Faculty.

The Aaron M. Fish Scholarship of Excellence in Mechanical Engineering and the Ilco Unican Inc. Scholarship of Excellence in Mechanical Engineering: Established in 1999 through the generosity of Mr. Aaron M. Fish, Chairman and CEO, Ilco Unican Inc. Eligibility: These non-renewable entrance scholarships are awarded to one male and one female student upon entry to Concordia University to pursue studies in Mechanical Engineering.

Concordia University Alumni Association Entrance Scholarship: Established in 1999 by the Concordia University Alumni Association. Eligibility: Open to all deserving undergraduate students upon entry to Concordia University without restriction to faculty.

Concordia Hong Kong Foundation Entrance Scholarships: These two renewable entrance scholarships were established in 1999 by Concordia Hong Kong Foundation. This foundation was established by Concordia University Alumni in Hong Kong. Eligibility: Open to holders of Hong Kong or Chinese citizenship, who are graduating from secondary school in Hong Kong or S.A.R. or the People's Republic of China.

Rona and Irving Levitt Family Foundation Entrance Scholarships: Intended to assist students attending Concordia University, a number of scholarships are available to students entering their first year of full-time study. These scholarships are valued at \$1,000 each and are non-renewable. They are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent and a personal statement provided by the applicant. Application forms are available from the Financial Aid and Awards Office. The deadline is April 1.

Lightspeed Software Technologies Scholarship: Established in 1998 through the generosity of Lightspeed Software Technologies. Eligibility: This non-renewable entrance scholarship is awarded to a first-time, full-time undergraduate student who is pursuing a Major in Physics.

Liberal Arts College Entrance Scholarship: For further details, contact the Principal's office, Liberal Arts College: (514) 848-2565.

Loyola Alumni Association Inc. Education Grant: Created to assist deserving undergraduate or graduate students at any level, whether as entrance or in-course awards. Any Concordia University applicant is eligible but preference will be given to children and grandchildren of active Loyola Alumni Association members. For further information and application forms, contact the Financial Aid and Awards Office. The deadline is April 1.

Loyola Foundation Inc. Entrance Scholarships

Several endowment funds which originated from donors wishing to support Loyola College allowed for the establishment of these scholarships. Their donations were turned over to the Loyola Foundation shortly after the Foundation's creation in 1973 to be used for objectives, activities and purposes that would "foster and maintain the tradition and spirit of Loyola College," irrespective of the major structural changes anticipated at the time. It is the continuing wish of the Foundation that these scholarships encourage and support the education of persons of good character who respect and share the tradition and spirit of Loyola College.

The awards funded by the Loyola Foundation consist of two renewable entrance scholarships of \$2,000 each. This endowment is the amalgamation of the following awards:

The Dr. William Atherton History Prize Fund
The Ursula Carling Fund
The Mrs. John Moriarty Fund
The St. Ignatius Men's Association Fund
The Clive Moore Memorial Fund
The George V. Uihlein Jr. Memorial Fund
The O'Hearn and O'Connor History Prize Fund
The Loyola Alumni Association Fund
The James Webber Trust Fund
The Clarence G. Smith Memorial Fund

The Susan Langley Fund
The Loyola Evening Students' Fund
The Professors McGuigan and McPhee Fund
The Francis J. Dowling Fund
The Lilley F. Barry Fund
The Kenneth J. McArdle Memorial Fund
The Charles J. Brown Memorial Fund
The Gordon Bennett Memorial Fund
The Avon Products of Canada Fund

Eligibility:

- available to graduates of Loyola High School entering a Concordia University undergraduate programme on a full-time basis;
- required presentation of a letter of recommendation from Loyola High School, following the completion of cégep or equivalent;
- awards to be made on the basis of academic achievement at cégep or equivalent and the strength of the recommendation by Loyola High School, with the final selection to be left to Concordia University;
- renewable annually subject to continuing full-time enrolment and maintenance of a GPA of 3.00 or better.

Application:

Application and recommendation forms are available from the Financial Aid and Awards Office of Concordia University and the Admissions Office of Loyola High School. Application and letters of recommendation must be returned by March 1.

Richard and Carolyn Renaud Scholarship: Established through the generosity of the Lengvari family, this entrance scholarship is open to a student applying to a Major in Political Science at Concordia University.

Vince Sirois Memorial Scholarship: Created through the generous assistance of Imperial Oil Limited to honour Vince Sirois, former senior Vice-President and Director, Imperial Oil Limited, and former member of the Board of Advisers, Concordia University, School of Community and Public Affairs. This award is available to a bilingual student entering the School of Community and Public Affairs who, in addition to academic achievement, has demonstrated a commitment to public life. For further details, apply to the Principal, School of Community and Public Affairs: (514) 848-2575.

300.3 CONCORDIA UNIVERSITY IN-COURSE SCHOLARSHIPS

In-course Scholarships are awarded to full-time students (unless otherwise indicated) who have completed at least 24 full-time credits during the previous academic year at Concordia University. Recipients are selected in the summer on the basis of the previous year's academic achievement. These scholarships are paid in the following Fall and Winter Terms. Recipients must maintain their full-time status throughout the year in which the award is tenable. Academic performance is reviewed by the Office of the Registrar. Please note that award recipients may hold only one of the following types of awards in a given academic year:

- Concordia University Entrance Scholarships
- · Concordia University In-course Scholarships
- Concordia University In-course Bursaries

Concurrent tenure in the aforementioned awards is not allowed unless expressly authorized by the University Undergraduate Scholarships and Awards Committee.

Open to Students in Any Faculty

Association of Alumni of Sir George Williams University Inc. Scholarship: Established in 1988 through the generosity of the Association of Alumni of Sir George Williams University. Eligibility: Open to all full-time students.

Russell Breen Scholarship: Established in 1985 in honour of Dr. Russell Breen for his many years of dedication and service to Loyola College and Concordia University. Eligibility: Open to all full-time students.

Laurie Brodrick Scholarship: Established in 1995 in memory of Ms. Laurie Brodrick, an athlete and graduate of Concordia University. Eligibility: Open to a second-year undergraduate athlete.

Campaign for the New Millennium Scholarships: Established in 1999 through the generous commitment of students to Concordia University's Campaign for the New Millennium. Eligibility: Available to students studying full- and part-time in the Faculties of Arts and Science, Commerce and Administration, and Fine Arts.

Harry and Grace Colle Scholarship: Established in 1986 through a bequest to Concordia University by Mrs. Grace Colle, the awarding of this scholarship continues the lifelong interest of Harry and Grace Colle in the education of young individuals. Eligibility: Open to all full-time students.

Concordia University Part-time Scholarships: A number of scholarships are available to students who are continuing their studies on a part-time basis. To be eligible for these scholarships, students must have successfully completed at least 12 credits, but no more than 24 credits, and be registered as a part-time student for the upcoming academic year. The value of the scholarship is dependent upon the number of credits the recipient is registered for at the time of selection in September for the Fall and Winter semesters.

Concordia University Alumni Association, Inc. Scholarship: Established in 1993 through the generous support of Concordia University Alumni. This fund supports a number of scholarships. Eligibility: Open to all full-time students in any faculty.

Concordia University 25th Anniversary Scholarship: Established on the occasion of the 25th Anniversary of the creation of Concordia University to celebrate and mark this event for posterity. The scholarship recipient will be selected by the Undergraduate Scholarships and Awards Committee. Eligibility: Available to Canadian Citizens, Permanent Residents and International students and awarded in recognition of academic achievement to undergraduate students without restriction to their field of study.

Brian T. Counihan Scholarship for Outstanding Contribution to Student Life: Established in 1995 in honour of Brian T. Counihan's contributions to student life over his 25-year tenure as the first Dean of Students of Concordia University. Eliqibility: Awarded, at the discretion of the Undergraduate

Scholarships and Awards Committee and upon recommendation by a staff member, in recognition of contribution to student life and academic achievement, to undergraduate students, without restrictions to the level of study, student status, or citizenship. Candidates will be required to have completed one full academic year or equivalent and have a minimum GPA of 3.30.

Friends of Concordia Scholarship: Established through contributions from various foundations, corporations, alumni, members of the University community, and Friends of Concordia. This fund also includes contributions from the American Association of Cost Engineers. Eligibility: Awarded, at the discretion of the Undergraduate Scholarships and Awards Committee, in recognition of academic achievement, to undergraduate students, without restriction to their field of study.

Henry F. Hall Scholarship: Established in 1982 by the faculty and staff of Sir George Williams University in recognition of the many years of service given to the University by the late Dr. Henry F. Hall. Eligibility: Awarded annually on the basis of merit to a full-time student.

Hellenic Students' Association Scholarship*: Established in 1988 by the Hellenic Students' Association of Concordia University. Eligibility: Open to all Canadian Citizens, Permanent Residents, or International students who can demonstrate Greek ethnic origin by providing an English copy of the applicant's and/or applicant's parents' birth certificates. Candidates must advise the Director of Financial Aid and Awards in writing, and provide their Concordia University I.D. number and supporting documents no later than August 1 for consideration in the following academic year.

Bill Hunt Memorial Scholarship: Established in 1977 in memory of the late Bill Hunt, a graduate of Sir George Williams University, by friends and associates from the YMCA, where Mr. Hunt was a social worker. Mr. Hunt was interested in the rehabilitation of adolescents who had dropped out of school. Eligibility: Open to all full-time students, and meant to help students who are attempting to re-establish their lives and their education.

Leslie and Kaye Jowett Scholarship: Established in 1989 through the generosity of E. Leslie Jowett, a former Sir George Williams College student who returned to the University following his retirement and graduated from the Faculty of Fine Arts in 1982. Eligibility: Awarded annually to full-time students, without restriction to their field of study.

Meloche Monnex Inc. Scholarship: Established by J. Meloche Inc., a leading insurance broker, this non-renewable scholarship will be awarded on the basis of academic merit. Eligibility: Awarded annually to a full-time student who has completed at least 24 credits at Concordia University, and without restriction to his/her field of study.

Nicholas Racz Memorial Scholarship: Established by the friends and associates of Nicholas Racz in a tribute to his character and indomitable spirit. In his life he gave much of himself to those around him, and his friends felt that it would be fitting that his sense of caring for others be continued through the implementation of this scholarship. Eligibility: Awarded annually to full-time students, without restriction to their field of study.

Lucien N. Rossaert Memorial Scholarship: Established in 1989 by friends and colleagues in memory of Mr. Rossaert, former Vice-Chair of the Conseil Supérieur de L'Éducation. Eligibility: Open to all students.

William Schiff Scholarship: Established by the Senior Students' Appeal Committee in 1988 to honour the late William Schiff, an active senior student, and a founding member of the Sparklers Club. Eligibility: Awarded annually to a Senior full- or part-time student who is 55 years of age or over and who is pursuing a university major.

Susan Levin-Woods Scholarship*: Established in 1988 by Susan Levin-Woods, a graduate of Concordia University. Eligibility: Awarded annually to a Canadian woman who has demonstrated excellence in her studies and who is pursuing a degree on a full- or part-time basis while following a career path or bringing up a family. The recipient must have completed 30 credits towards her degree. Application forms are available at the Financial Aid and Awards Office, and must be submitted before August 1.

Open to Students in the Faculty of Arts and Science

Applied Human Sciences

A. Ross Seaman Memorial Scholarship*: Established in 1987 to honour the memory of A. Ross Seaman for his life-long dedication to the communities of Concordia University, Dawson College, Kamp Kanawana and the YMCA. Each year, students from these four institutions are recognized for their leadership and scholarship. Eligibility: Students can apply or be nominated. Application information is available from the Department of Applied Human Sciences at Concordia University.

Communication Studies

Mix 96 — Nick Auf der Maur Memorial Scholarship*: Established in 1989 by Mix 96 radio station to promote studies in the fields of Communication Studies and Journalism. Eligibility: Awarded to second-year students in Journalism or Communication Studies (in alternate years), exhibiting an interest in radio broadcasting. Interested candidates should contact the Chair of the Department of Journalism or Communication Studies by January 31: (514) 848-2555.

John W. O'Brien Scholarship*: Established in 1984 to honour Dr. John W. O'Brien, first Rector of Concordia University, for his contribution to Sir George Williams University and Concordia University. Eligibility: Restricted to students entering the Honours Programme. Interested candidates may contact the Chair of the Department of Economics in May of each year: (514) 848-3900.

English

Compton-Lamb Memorial Scholarship*: Established in 1974 in memory of the late Neil Compton and Sidney Lamb by faculty members in the English Department of Sir George Williams University. This scholarship is intended to recognize an outstanding Honours student in the English Department. Eligibility: The recipient must be entering the final year of an Honours programme. This includes students in the English Literature and the joint Honours in English and Creative Writing Programmes. Students must submit a copy of their record and an essay written for an English Literature course. Deadline for submission of said essay to the Department of English is February 28.

History

McGrath-Smith Memorial Scholarship*: Established in 1981 in memory of the late Warrant Officer, P.J. McGrath, RCAF, and Sergeant F.W. Smith, RAF, who gave their lives in combat in 1942 during an anti-submarine flight operation. Eligibility: Open to all full-time students and awarded to the student who attains the highest grade in the History of Canada HIST 203/205. The recipient is chosen upon the recommendation of the Chair of the Department. For further information, contact the Chair of the History Department by May 31.

BPW Montréal Judith Litvack Women's Scholarship: Established in 1998 through the generosity of the Business and Professional Women's Club (BPW) to provide for an annual in-course scholarship. The scholarship is funded by an endowment from the late Judith Litvack, who was once a student at Concordia University. The Business and Professional Women's Club of Montréal is one of the oldest women's organizations in Montréal. Created in 1926, the organization belongs to the Québec, Canadian and International Federations of Business and Professional Women's Clubs. The BPW promotes women's self-reliance and financial independence. Eligibility: These non-renewable scholarships are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement to either full- or part-time students who have completed at least 24 credits at Concordia University, and are open to all full- and part-time female students in the Faculty of Arts and Science enrolled in the Humanities or Social Sciences.

Canadian Corporate News Scholarship: Established through the generosity of Canadian Corporate News, which distributes news releases to the media and investment community. Canadian Corporate News also publishes directories under the name of Matthews Media directories. Eligibility: Available to a scholastically deserving full-time undergraduate student pursuing a Major in Journalism.

Canadian Women's Press Club (Montréal Branch) Scholarship: Established in 1976 by the Canadian Women's Press Club (Montréal branch) to promote studies in the field of Journalism. Eligibility: Open to any student, full- or part-time, entering the second-year of the Journalism programme.

Al Cauley — CJAD Electronic Journalism Grant*: Established in 1982 by CJAD radio station to honour longtime Montréal broadcaster Al Cauley. Eligibility: Awarded annually to a second- or third-year student enrolled in the Journalism programme, who shows potential for a career in broadcast journalism. This award is given in April, and is non-renewable. Applications should be made to the Director of the Department of Journalism, and should include a description of the applicant's broadcast activities and interests, a copy of his or her transcript, and a short demonstration tape (audio/video).

Mathematics and Statistics

Axa Canada Scholarship: Established by Axa Canada Inc. in 1999. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students pursuing a Specialization or Honours programme in Actuarial Mathematics. Students must have completed one full year of study in the programme.

Modern Languages and Linguistics

Carmine Di Michele Scholarship: Established in 1982 in honour of Carmine Di Michele, a faculty member of the Department of Modern Languages. Eligibility: Open to all students whose Major is Italian. The award is granted upon the recommendation of the Chair of the Department of Modern Languages and Linguistics.

Philosophy

Ada Israel Memorial Scholarship: Established in 1986 by the family of the late Ada Israel, a student at Concordia University. Eligibility: Open to full-time students in the Philosophy Department who have completed at least 24 credits in Philosophy and who have made a contribution to the Concordia University philosophy community. Selection is made by the Chair, in consultation with the Department's Undergraduate Studies Committee.

Political Science

Political Science Jean H. Picard Foundation Scholarships*: A number of scholarships are available to Political Science students. Interested students should contact the Chair of the Political Science Department by January 15: (514) 848-2105.

Zeidan Family Scholarship*: Established in 1994 by Mr. and Mrs. Omar Zeidan, this scholarship is open to students in the Faculty of Arts and Science who have successfully completed a course in Middle Eastern Studies. Eligibility: The recipient will be selected on the basis of an essay of approximately 3,000 words on the theme "Arab/Islamic Canadian Relations." Students interested in submitting an essay must notify the Chair of the Political Science Department by February 1 and present the completed essay to the Chair of the Department by March 1.

Psychology

Lucille Irvine Memorial Scholarship: Established in 1967 by Mrs. William Broidy in memory of the late Lucille Irvine, a devoted teacher and former member of the staff of Sir George Williams University. Eligibility: Open to any full-time student in the Department of Psychology upon the recommendation of the Department.

Professor Joseph P. Zweig Scholarship: Established in 1981 in recognition of the contribution of Professor Zweig to Sir George Williams University and Concordia University in teaching and student services during his 43-year association with both universities. Eligibility: Awarded on the basis of high scholastic achievement, and a substantial contribution by a student studying in the areas of Psychology of Fitness, Exercise Science, and/or Behavioural Medicine. The candidates will be nominated by Faculty members in the Psychology Department involved in these areas.

Women's Studies

Maïr Verthuy Scholarship: Established in 1985 by colleagues and associates to honour Maïr Verthuy, a professor at Concordia University. Eligibility: Open to an undergraduate student whose Major is Women's Studies. The recipient must have completed 60 credits with a minimum overall GPA of 3.00, of which at least 30 credits must be in Women's Studies, with a minimum GPA of 3.50.

Open to Students in the Faculty of Commerce and Administration

Stacie Lee Bessner Memorial Scholarship: Established in 1978 by the Bessner family in memory of their daughter Stacie Lee. Eligibility: Open to any full-time student.

Gunther Brink/Petro-Canada Scholarship: Established in 1989 by Petro-Canada in honour of Gunther Brink, a retired faculty member in the Faculty of Commerce. Eligibility: Open to any full-time student.

Commerce and Administration Students' Association Scholarship*: Established in 1990 by the Commerce and Administration Students' Association. Eligibility: Open to all full- and part-time students, these scholarships are awarded on the basis of scholastic performance and contribution to the Faculty of Commerce and Administration student life. Applications are available from the Financial Aid and Awards Office and must be returned by September 15.

Magnus Flynn Scholarship: Established in 1983 to honour Magnus Flynn for his years of devotion to Sir George Williams University and Concordia University. Eligibility: Granted to a Commerce student with high academic standing, who has made a strong contribution to student life. The award is based on the recommendation of the Dean of the Faculty.

P.T.R. Pugsley Memorial Scholarship: Established in the 1960s by friends of the late Professor Pugsley to commemorate his many years of service as senior professor in the Faculty of Commerce at Sir George Williams University. Eligibility: Awarded annually to an outstanding student in the Faculty of Commerce and Administration.

Accountancy

Arthur Andersen and Company Scholarship: Established in 1976 by the Chartered Accountant firm of Arthur Andersen and Company. Eligibility: Awarded to a Commerce student entering his/her final year and whose Major is Accountancy. Students must have a good academic record, and demonstrate leadership qualities in the classroom as well as in student activities.

Howard Gilmour Scholarship: Established by Mr. Gilmour's partners at Richter, Usher and Vineberg, Chartered Accountants. Eligibility: Awarded annually to a Commerce student whose Major is Accountancy, and who is entering the second year of the programme.

Raymond, Chabot, Grant Thornton Scholarship*: Established in 1989 by Raymond, Chabot, Grant Thornton, Chartered Accountants to encourage and reward outstanding Accounting students, this award includes a 13-week summer job, offering on-the-job training, plus a scholarship. Eligibility: Awarded to a full-time, second-year bilingual Commerce student whose Major is Accountancy. The scholarship is based on the student's academic performance, top decile ranking in Accounting courses, and participation in on- or off-campus activities. Application forms are available from the Financial Aid and Awards Office. The deadline is November 30.

Shell Canada Limited Recruitment Scholarship*: Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student whose Major is Accountancy or Marketing, who has completed at least 30 credits, and who can demonstrate participation in extra-curricular activities.

International Business

Peter Glasheen Memorial Scholarship: Established in 1986 by friends, associates, and family of the late Peter Glasheen as a tribute to the spirit of his life — a major aspect of which was his abiding commitment to young people, their education, and their future. Eligibility: Open to students in the International Business Programme, Faculty of Commerce and Administration.

Le Château Stores Scholarship: Established in 1976 by Le Château Stores of Canada Limited. Eligibility: Open to all full-time students in the Faculty of Commerce entering their final year of study, and specializing in Marketing.

Joanisse Marketing Communication Scholarship: Established in 1987 in memory of the late lan Roberts, founder and President of Ian Roberts Inc. Eligibility: Open to a Commerce student whose Major is Marketing, and who is entering his/her final academic year. The recipient must have completed the "Advertising and Sales Promotion Management" course (MARK 453). The recipient will be nominated by the Chair of the Marketing Department to the Undergraduate Scholarships and Awards Committee.

Shell Canada Limited Recruitment Scholarship*: Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student whose Major is Accountancy or Marketing, who has completed at least 30 credits, and whose participation in extra-curricular activities has been demonstrated.

Open to Students in the Faculty of Engineering and Computer Science

James McQueen Scholarship: Established in 1979 by the family of the late James McQueen as a tribute to his interest in education and higher learning. Eligibility: Open to all students in the Faculty of Engineering and Computer Science.

Richard Laurence Weldon Scholarship: Established in 1969 through the estate of Richard Laurence Weldon. Eligibility: Awarded annually to a student in the Faculty of Engineering and Computer Science at the discretion of the University Scholarships and Awards Committee.

Jaan Saber, Phoivos Ziogas Memorial Scholarship: Established in 1998 by a former student and friend of Professors Jaan Saber and Phoivos Ziogas to honour their memory and continue their traditions of engineering excellence. Eligibility: This non-renewable scholarship is awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement to full-time students who have completed at least 24 full-time credits during the previous academic year at Concordia University. This award is open to all full-time students in the Faculty of Engineering and Computer Science.

Building Engineering

Magil Construction Ltd. Scholarships: A number of in-course scholarships are available through the generous support of Magil Construction Ltd. Eligibility: Open to all full-time undergraduate students in Building Engineering, and to students who have completed between 35 and 70 credits in the Building Engineering programme. The recipients will be selected by the Chair of their respective programmes on the basis of academic excellence.

Computer Science

Corporate Software & Technologies Scholarship: Established in 1996 to support a deserving undergraduate student in the Department of Computer Science. The recipient will further have an offer of summer employment with the Corporate Software & Technologies company. Eligibility: Open to full-time undergraduate students in the Faculty of Engineering and Computer Science, Department of Computer Science.

Department of Computer Science Scholarship: Established in 1996 by Dr. Clement Lam to recognize an outstanding student registered in the Department of Computer Science. Eligibility: Awarded to the highest ranked full-time undergraduate student in the Department of Computer Science who has completed a minimum of 50 credits.

Peter Matthews Memorial Scholarship: Established in 1987 by his family to honour the memory of Peter Kent Matthews, who passed away in 1986. Eligibility: Open to all full-time Computer Science students who have completed a minimum of 30 credits in the programme, and are entering the second or final year of their undergraduate programme, or entering the first or second year of a Master's programme. Selection is made upon the recommendation of a Computer Science faculty member to the Dean on the basis of academic standing.

Saco Smartvision Scholarship: Established in 1999 through the generosity of Saco Smartvision Inc. to provide for one annual in-course scholarship in the Faculty of Engineering and Computer Science. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students upon the completion of their first year of study in Electrical Engineering, Mechanical Engineering, or Computer Science.

Shell Canada Limited Recruitment Scholarship*: Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student in Computer Science or Electrical Engineering, who has completed at least 30 credits, and can demonstrate participation in extra-curricular activities.

Civil Engineering

Magil Construction Ltd. Scholarships: A number of in-course scholarships are available through the generous support of Magil Construction Ltd. Eligibility: Open to all full-time undergraduate students in Civil Engineering, and to students who have completed between 35 and 70 credits in the Civil Engineering programme. The recipients will be selected by the Chair of their respective programmes on the basis of academic excellence.

Electrical and Computer Engineering

Saco Smartvision Scholarship: Established in 1999 through the generosity of Saco Smartvision Inc. to provide for one annual in-course scholarship in the Faculty of Engineering and Computer Science. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students upon the completion of their first year of study in Electrical Engineering, Mechanical Engineering, or Computer Science.

Shell Canada Limited Recruitment Scholarship*: Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student in Computer Science or Electrical Engineering, who has completed at least 30 credits, and can demonstrate participation in extra-curricular activities.

Julian C. Smith Memorial Scholarship: Established in 1997 by the Board of Directors of the Julian C. Smith Memorial Fund Corporation to honour the life and contributions of Julian C. Smith, who until his death in 1939 was the President of Shawinigan Water & Power. Eligibility: Granted annually to a second- or third-year student in Electrical Engineering.

SR Telecom Scholarship: Established in 1993, this scholarship is funded by an endowment provided by SR Telecom Inc. Eligibility: Open to an undergraduate student in Electrical Engineering.

Silas Katz Memorial Scholarship*: First awarded in 1984, this scholarship was made possible through donations from faculty, students and staff, in memory of the late Dr. Silas Katz, Professor of Mechanical Engineering. Eligibility: Open to students in Mechanical Engineering. Consideration will be given to those students who are mature, self-supporting, and who maintain a good academic performance and have completed between 30 and 90 credits. Selection is made by an Advisory Committee to the Chair. Recipients are notified in October. The award is renewable if the student maintains the criteria. Contact the Chair, Department of Mechanical Engineering for information.

Mechanical Engineering

Saco Smartvision Scholarship: Established in 1999 through the generosity of Saco Smartvision Inc. to provide for one annual in-course scholarship in the Faculty of Engineering and Computer Science. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students upon the completion of their first year of study in Electrical Engineering, Mechanical Engineering, or Computer Science.

Open to Students in the Faculty of Fine Arts

Faculty of Fine Arts Development Fund Scholarships: The Faculty of Fine Arts offers a number of in-course scholarships, made possible by donations to its Faculty Development Fund. Eligibility: Awarded on the basis of academic achievement to second- and third-year students in the Faculty of Fine Arts (i.e. those having completed 24 credits or more).

Ruth Louise Vaughan Memorial Scholarship: Established in 1984 by the Vaughan Family in memory of their sister and daughter. Eligibility: Awarded annually to a student in the Faculty of Fine Arts.

Anne Savage Memorial Scholarship: Anne Savage was a pioneer Canadian art educator and painter who died in 1971. She was an important influence on the founders of the art education programme at Sir George Williams University. The Anne Savage Memorial Scholarship was initiated after her death with contributions made in her memory by friends and former students. In making this award, the Art Education Department of the Faculty of Fine Arts hopes to carry on the tradition of dedication, innovation and quality established by Anne Savage in her lifetime and to assist students preparing for careers as art teachers. Eligibility: This scholarship is awarded annually to an outstanding student in Art Education. Recipients are selected on the basis of artistic and academic achievement and commitment to the vocation of teaching.

Kodak Scholarships*: Awarded annually to Cinema students on the basis of outstanding performance in Film Production. Selection is done exclusively by the School of Cinema.

Heather Walker Memorial Scholarship: Established in 1995 by the Faculty of Fine Arts through the donations of colleagues and friends. Heather Walker was an academic adviser in the Office of Student Affairs and she represented our best attitude toward students. She graduated with a BFA in Cinema in 1980, and obtained a second BFA in Photography in 1988. Heather pursued successful artistic activities in Photography and was dedicated to humanitarian organizations such as Families for Children, Development and Peace and H.O.P.E. Eligibility: Awarded annually to a full- or part-time student in one of the programmes offered in Cinema or Photography. The recipient is selected on the basis of artistic and academic achievement, and on commitment to humanitarian activities.

Sean Wall Scholarship: Established in 1992 by his parents, Deanna and Ted, and his brothers, George and Wilder, as tribute to Sean Wall who was a promising young Film Production student at Concordia University. Eligibility: Awarded annually to the most outstanding Cinema student entering second year. Selection will be made by the School of Cinema on the basis of work completed during the first year at Concordia University.

Studio Arts

Robert Langstadt Memorial Scholarship: Established by Mrs. Anne Kahane Langstadt in memory of her husband. Anne Kahane and Robert Langstadt are former professors in the Faculty of Fine Arts. Eligibility: Awarded annually to a full-time undergraduate student whose Major is Painting and Drawing or Studio Arts. The recipient must be entering his/her second or third year of study in the programme. This award is alternated between Studio Art and Painting and Drawing on an annual basis.

Norman McLaren Film Animation Scholarship: Established in 1981 by the late Norman McLaren, an animation film-maker. Eligibility: Awarded to a Film Animation student. Selection is done exclusively by the School of Cinema.

Stevenson Colour Scholarship: Established in 1991 by the Stevenson family in memory of David L. Stevenson, founder of Stevenson & Son Co. Ltd. Eligibility: Two scholarships are available to students in the Faculty of Fine Arts, whose Major is Painting and Drawing.

300.4 CONCORDIA UNIVERSITY COLLEGE SCHOLARSHIPS

Liberal Arts College

Liberal Arts College Scholarships: The Liberal Arts College administers several scholarships that are awarded annually. These awards are made possible by donations from friends of the Liberal Arts College, and are based upon high academic performance in Liberal Arts courses. Renewal is possible providing the student maintains the criteria for the award. These awards are:

- Liberal Arts College Scholarship
- Frances and David Rubin Scholarship
- Thomas More Scholarship
- · George Rudé Scholarship

Lois and Stan Tucker Scholarship: Established in 1993 by Lois and Stan Tucker who believe that the love of learning and the development of intellectual curiosity constitute the basis for a fulfilled life. For further information, contact the Principal, Liberal Arts College: (514) 848-2565. Eligibility: Open to students enrolled in the Liberal Arts College.

Lonergan University College

Mark Doughty Scholarship and Award: Awarded annually to a student who is a member of the Lonergan University College, upon the recommendation of the Principal and the College Council. To be eligible for the scholarship, students must have completed a minimum of 18 credits at Lonergan University College. Recipients are selected on the basis of academic excellence and their contribution to the intellectual and social life of the College. For further information, contact the Principal, Lonergan University College: (514) 848-2280.

300.5 AWARDS AND PRIZES

Administrative Management Society Award*: Established by the AMS in memory of John Crawford and in honour of past presidents, this award will be made in alternate years to an undergraduate student in the Department of Education. This award will be based solely on academic merit. Eligibility: Interested candidates should contact the Chair of the Department of Education: (514) 848-2004.

Alain Award in Electroacoustics*: Established in 1985, this award is granted annually to a student who demonstrates commitment and ability in the field of electroacoustics. Eligibility: Open to students registered in the Electroacoustics programme within the Music Department of the Faculty of Fine Arts. Interested candidates should contact the Chair of the Music Department: (514) 848-4705.

Bauer Inc. Women's Hockey Awards: Established in 1998 through the generosity of Bauer Inc. to provide for two annual in-course awards. Eligibility: These non-renewable awards are awarded on the basis of academic achievement to either full-time or part-time students who have successfully completed at least 18 credits at Concordia University in the previous academic year. The awards are open to all full- and part-time CIAU-eligible student athletes who are members of the Concordia University Women's Hockey team.

Brenda Carter Memorial Award*: Established in memory of Brenda Carter by her husband, David Wheeler, Professor Emeritus at Concordia University, as well as by friends and colleagues. Brenda Carter was a dedicated educator and elementary school principal until ill health forced her retirement. Without formal mathematical processes and procedures, and while not a doctrinaire feminist, she very much wanted many more women to find the keen pleasure in mathematics that she found. Eligibility: Awarded annually to a female registered in a graduate or undergraduate programme in Mathematics. Preference will be given to a candidate who meets some or all of the following criteria:

- demonstrates a proven interest in teaching;
- · has returned to academic study after an interruption;
- has overcome some particular handicap or obstacle (e.g. in academic background, health or financial security);
- · is active in a social, political or professional organization.

Students wishing to apply for this award should contact the Secretary to the Chair, Department of Mathematics, Loyola Campus, Room HB 236: (514) 848-3223. The deadline is December 15.

Richard M. H. Cheng Award*: Established by the family of Professor Cheng to commemorate his 25 years of service at Concordia University and to promote the concept and practice of engineering design among young mechanical engineers. Selection of the award will be made by an Advisory Committee to the Chair, Department of Mechanical Engineering, and the criteria of excellence will include evidence of creativity, usefulness, detailed design, reporting and presentation. Eligibility: Awarded annually to a full-time undergraduate student, or group of students, of the Mechanical Engineering programme who is judged to have demonstrated excellence in a student project that is devoted to open-ended engineering design.

Harry Clinch Book Prize: Established in 1982 by friends and colleagues to honour retiring Professor Harry Clinch, founder of the Geography Department. Eligibility: Open to all full-time students in the Geography Department. Selection is done by the Chair of the Department.

Lindsay Crysler Award: Established by students, colleagues and friends in honour of Professor Lindsay Crysler, longtime teacher and Director of the Department of Journalism, on the occasion of his retirement. Eligibility: Open to all students entering the first year of undergraduate studies within the Department of Journalism. Selection will be made by a Committee of the Department, which will take into consideration the following material extracted from the student's application for admission:

1. Transcript of marks; 2. The "letter of intent"; 3. The English proficiency scores. For further information, students should contact the Department of Journalism: (514) 848-2465.

Ann Duncan Award for the Visual Arts*: Established in 1997 by the Leonard & Bina Ellen Art Gallery to honour the memory of Montréal art critic Ann Duncan, who, through her writings on the arts, played a significant role in supporting the work of artists in the early stages of their careers. Used to fund an internship at the Ellen Art Gallery, the Ann Duncan Award for the Visual Arts will allow a student to

pursue a research project in his/her area of interest. The project should reflect the museological activities of an art institution dedicated to the collection, presentation and interpretation of Canadian art. Eligibility: Awarded annually to a full-time undergraduate student enrolled in a programme in the Department of Studio Arts and/or Art History who has completed a minimum of 24 credits and maintained a minimum B+ average at Concordia University.

Dr. Ed Enos Athletic Excellence Award: Established in 1998 through the generosity of family and friends on the occasion of Dr. Ed Enos' induction into the Concordia University Sports Hall of Fame. Awarded by the Undergraduate Scholarships and Awards Committee with the assistance of the Director of Recreation and Athletics and in compliance with CIAU regulations. Eligibility: Granted to a full-time student whose Major is Exercise Science, on the basis of academic and athletic merit.

Henry Gamer Award for Acting*: Established in 1991 by Mrs. Sarah Gersovitz in the name of her brother, the actor Henry Gamer. The intent of the award is to recognize the most outstanding single performance each year by a graduating theatre student. Eligibility: Open to a full-time student in Theatre.

Garnet Menger Award*: Established in 1990 in memory of the notable musician and teacher, Garnet Menger. This award is given annually to an outstanding student in any Department of Music programme. The award acknowledges accomplishment in both academic and student life activities. Application forms are to be accompanied by two letters of reference from full- or part-time faculty in the Department of Music and are available from the Department of Music. The scholarship is awarded in May of each year, and the deadline for applications is April 15.

Cynthia Gunn Journalism Award*: Established in 1981 by family and friends to honour the memory of the late Cynthia Gunn, a reporter with The Montreal Star and The Gazette. Eligibility: Open to all prospective journalists enrolled in a second- or third-year Journalism programme who are full- or part-time students. Applicants are judged on the basis of marks, published work (if any), and written work produced for Journalism workshops. Applications must be made to the Director of the Department of Journalism, and must include a current transcript, two samples of written class work, and two samples of published work.

Irving Layton Award for Creative Writing*: Established in 1988 by the Department of English, with the support of friends and colleagues, to honour one of Montréal's, and Canada's, finest poets. Irving Layton's association with Concordia University includes many years as a generous and inspiring teacher, distinctive service as writer-in-residence on several occasions, and Adjunct Professor of English. Eligibility: Open to students who are completing the last 30 credits of their programme, and who have demonstrated excellence in the writing of poetry, fiction, or drama. For further information and application forms, contact the Chair of the Department of English: (514) 848-2340 or 848-2320.

Graham Marks Memorial Award*: Established in 1985 by Ester Spevack Marks in memory of her late husband, Graham Marks, who, after spending a lifetime building a successful retail business, returned to University to complete a degree in Human Social Science and entered the counselling profession. Eligibility: Open to part-time students who show promise in their studies, but who, because of financial circumstances, are unable to attend the seminar programme of the Centre for Human Relations and Community Studies. For an application, contact the Director of the Centre by January 31: (514) 848-2273.

Helen McNicoll Art Prize: Established in 1975 in honour of Canadian painter Helen McNicoll, by the late Mrs. R. Fraser Elliott. Eligibility: This prize is awarded in alternate years to third-year students in Visual Arts and Art History who have shown exceptional talent. Selection is made upon the recommendation of the Faculty of Fine Arts.

Louis Muhlstock Drawing Prize*: Established in 1984 by Mr. Muhlstock to recognize the outstanding accomplishments of Fine Arts students. Eligibility: Open to a full-time undergraduate Fine Arts student whose Major is Painting and Drawing or Studio Arts. The award will be given on the basis of artistic talent to students who are registered in one of the 300- or 400-level Drawing courses. For further information and an application, contact the Chair of the Department of Studio Arts: (514) 848-4262.

Frank B. Walker Journalism Awards*: Established in 1995 to honour the memory of the late Frank Walker (1916-1985), editor-in-chief of *The Montreal Star* from 1968 to the paper's close in 1979. Eligibility: Two awards are made available to deserving students in the Department of Journalism to encourage and recognize excellence in writing. One award is available to a student completing the first year, and another to a student completing the second year of the Journalism programme.

Heather and Erin Walker Humanitarian Award: Established in 1995 by the Faculty of Fine Arts through the donations of colleagues and friends to honour the memories of Heather Walker and her daughter Erin. An academic adviser in the Office of Student Affairs of the Faculty of Fine Arts, Heather Walker represented our best attitude toward students and both she and her daughter Erin were dedicated to humanitarian organizations such as Families for Children, Development and Peace and *H.O.P.E.* Eligibility: Awarded annually to a full- or part-time student enrolled in a Bachelor of Fine Arts. Selection is made by the Office of Student Affairs upon recommendation of full- or part-time faculty members, based on demonstration of humanitarian service while in pursuit of excellence in academic, artistic, and community service or related endeavours.

300.6 ENTRANCE BURSARIES

Concordia University Alumni Association Ottawa Chapter Entrance Bursary: Established in 1999 by the Ottawa Chapter of the Concordia University Alumni Association. This entrance bursary is application-driven and the selection is done by the Undergraduate Scholarships and Awards Committee. Eligibility: This non-renewable entrance bursary is open to all full-time newly admitted students to Concordia University who are permanent residents of the National Capital Region, or should there not be such a candidate, a permanent resident of Eastern Ontario or Western Québec. This bursary is awarded on the basis of financial need and satisfactory academic standing.

Howard Davidson Bursary*: Established in 1996 through the generosity of Howard Davidson, BComm, a graduate of Concordia University. Eligibility: This renewable entrance bursary is granted to a scholastically and financially deserving full-time undergraduate student in the Faculty of Commerce and Administration, preferably pursuing a Major in Accountancy. This bursary is renewable to a maximum of two additional years.

Carolyn and Richard Renaud Entrance Bursaries*: Established in 1998 through the generosity of Carolyn and Richard Renaud, these entrance bursaries will be offered to newly admitted undergraduate students who are beginning, for the first time, a full-time programme of study at the university level. The entrance bursary may be renewed if the candidate maintains satisfactory academic standing as per the University's academic regulations, as well as a full-time course load (24 credits) for each year in which the award is tenable. Each bursary may be renewed twice for a maximum of three years, except for students in programmes of longer duration.

300.7 CONCORDIA UNIVERSITY IN-COURSE BURSARIES

Students must apply in order to receive in-course bursaries. The application form is available in the Financial Aid and Awards Office and completed applications should be returned to the Financial Aid and Awards Office by December, unless otherwise stated. The Financial Aid and Awards Office reserves the right to extend the application deadline to ensure that sufficient number of applications have been received.

The value of each award may fluctuate yearly depending upon current interest rates. Unless stated otherwise, awards are given to full-time students who are Canadian Citizens or Permanent Residents. Please note that award recipients may hold only one of the following types of awards in a given academic year:

- Concordia University Entrance Scholarships
- Concordia University In-course Scholarships
- Concordia University In-course Bursaries

Concurrent tenure of the aforementioned awards is not allowed unless expressly authorized by the University Undergraduate Scholarships and Awards Committee.

Open to Students in Any Faculty

All-Canadian Football Achievement Bursary: Created by Nestlé to recognize the outstanding performance of Canadian football players, this bursary is granted to an athlete who has at least one year of playing experience with the Concordia University football team. Eligibility: The recipient must have completed a minimum of 24 full-time credits at Concordia University, with a cumulative GPA of at least 3.30. This award is available to undergraduate or graduate students. For further details, see the Football Coach in Recreation and Athletics: (514) 848-3858.

Arab World International Bursary: Established in 1995 by Concordia University through the generosity of a number of Arab Gulf States. This bursary is intended to assist International students from the Arab world during their studies at Concordia University. Eligibility: Open to deserving International students who can demonstrate citizenship of any member state of the League of Arab States, or who, while stateless, reside in an Arab League state.

Association of Alumni of Sir George Williams University Bursaries: Established in 1988, through the generosity of the Association of Alumni of Sir George Williams University. Eligibility: Open to all full-time undergraduate students.

Birks Family Foundation Bursaries: The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian universities for the creation of the Birks Family Foundation Bursaries. These bursaries are awarded by the Foundation on the recommendation of the Bursary Selection Committee. They are not restricted to any faculty or course year, and may be renewed. The number and amount of awards may vary annually depending upon the funds available for this purpose from the Foundation.

Donald Buchanan Bursary: Established in memory of Donald Buchanan by friends in 1977. Eligibility: Open to all full-time undergraduate students.

Campaign for the New Millennium Bursaries: Established in 1999 through the generous commitment of students to Concordia University's Campaign for the New Millennium. Eligibility: Available to students studying full- and part-time in the Faculties of Arts and Science, Commerce and Administration, and Fine Arts.

Concordia University Bursaries: Established in 1990 by Concordia University, these bursaries are available to full- and part-time students who are Canadian Citizens, Permanent Residents and International students.

Concordia University/Bank of Montréal Affinity Card Emergency Bursaries: Established from proceeds received from the Concordia/Bank of Montréal Affinity Credit Card, these bursaries will fund financially needy full-time undergraduate students.

Concordia University Shuffle In-course Bursaries: Established through the participation and generosity of the University Community and Friends of Concordia. The Concordia Shuffle consists of a fund-raising "Walk-a-Thon" each year between the Sir George Williams and Loyola Campuses of Concordia University. A number of bursaries are awarded on the basis of scholastic achievement combined with financial need. Eligibility: Open to full-time undergraduate students in any faculty including International students and disabled part-time students. Applicants must have completed at least one full-time term of study at Concordia University.

Concordia University Alumni Association, Inc. Bursaries: Established in 1993 through the generous support of Concordia University alumni. Eligibility: The fund supports a number of bursaries that are awarded to full-time students in any faculty who are deserving, scholastically and financially.

J.P. Copland Memorial Bursary: Established in 1972 by the family of J.P. Copland. Eligibility: Open to all full-time undergraduate students.

Cecilia Crysler Bursary: Established by family and friends to honour a woman whose own aspirations to attend university were never fulfilled, but who subsequently became a friend and confidante to Concordia University students for over a decade. Eligibility: Awarded to a needy and deserving female first-year undergraduate student.

Crane Fund for Widows and Children Bursary: The Crane Fund for Widows and Orphans supports an annual bursary for Concordia University students. Eligibility: Open to all undergraduate students. Preference will be given to widows or orphans who display financial need.

Ecosense and Concordia University Alumni Association Inc. Bursary: Established by Ecosense (1978-91), a non-profit organization that actively promoted care of the environment, recycling, and the rational use and management of resources. Established also through a generous gift from the Concordia University Alumni Association, Inc. Eligibility: Proven active participation in promoting environmental awareness or improvement at the community level (i.e. involved in a grass roots movement such as QPIRG). The candidate should also demonstrate how he/she intends to orient his/her knowledge or degree towards improving the environment in the future. The candidate must be a full-time registered student at Concordia University in any field of study. The application should contain a copy of the student's curriculum vitae, a covering letter and a Concordia University transcript.

Friends of Concordia Bursary: Established through contributions from various foundations, corporations, alumni, members of the University community, and Friends of Concordia. Contributors to this award include endowment funds from Douglas Devenne, Bal Dobbs, Isidore Frishling, Dick MacDonald, Harry Pinker and Walter Stenhouse. Eligibility: Awarded at the discretion of the Undergraduate Scholarships and Awards Committee, in recognition of academic achievement, to undergraduate students.

Peter Glasheen Memorial Bursary: Established in 1986 by friends, associates, and family of the late Peter Glasheen as a tribute to the spirit of his life, a major aspect of which was his abiding commitment to young people, their education, and their future. Eligibility: Open to all full-time undergraduate Ellen Greenwood Ornstein Memorial Bursary: Established in 1991 in memory of Ellen Greenwood Ornstein by her family through the Henry and Bernice Kaufmann Foundation. Ellen Greenwood Ornstein graduated from the University in 1972. Eligibility: Awarded to a scholastically and financially deserving student.

F.P. Higgins Memorial Bursary: Established in 1991 by the late Francis Philip Higgins, this bursary is awarded to a francophone undergraduate student on the basis of scholastic achievement and financial need. Eligibility: Applicants must submit a copy of their high school and cégep transcripts, showing they pursued their studies in French, along with their In-course Bursary application form.

Ralph B. Hood Memorial Bursary: Established in 1973 by the late Ralph B. Hood, with the intention of assisting needy and deserving young students. Eligibility: Open to all full-time undergraduate students.

Japanese-Canadian Bursary: Established in 1984 in memory of Japanese-Canadians who served in the Canadian Forces in World Wars I and II. Eligibility: Awarded to a needy and deserving undergraduate student.

Joseph Gilbert Joyce Memorial Bursary: Established in 1967 in honour of the late Reverend Joseph Gilbert Joyce who, during his 24-year ministry at Verdun United Church, maintained a deep interest in the evening division of the University. This bursary was established in accordance with his conviction that knowledge and higher education should be available to those who seek to make a creative contribution to the development of mankind. Eligibility: Awarded to a part-time undergraduate student, on the basis of academic standing, financial need, and promise in his/her chosen field of study.

T.J. Madden Bursary: Established by the Senior Students' Appeal Committee to honour the late T.J. Madden, a founding member of the Senior Non-Credit Programme. Eligibility: This renewable bursary is awarded annually to a full-time, first-year undergraduate student. It is renewable twice for a maximum tenure of three years, provided the recipient maintains full-time status and achieves a GPA of no less than 3.0.

S.H. McNeilly Bursary: Established in 1963 by Mrs. Mary McNeilly in honour of her late husband, S.H. McNeilly. Eligibility: Open to all part-time students who can prove employment with the Canadian Pacific Railway Company. If no suitable candidates are found, it will be offered to other students.

Carolyn and Richard Renaud Bursaries: Established in 1998 through the generosity of Carolyn and Richard Renaud, these in-course bursaries are offered to full-time undergraduate students who have completed at least one semester of study at the University. These bursaries will be granted on the basis of scholastic merit and personal financial need. These bursaries are non-renewable, although recipients may apply in successive years.

Royal Albert Edinburgh Lodge Bursary: Established by the Royal Albert Edinburgh Lodge during the late 1960s. Eligibility: This bursary is awarded to (a) children of members of the Royal Albert Edinburgh Lodge, OR (b) children of members of other Masonic Lodges. If neither (a) nor (b) qualify, any worthy student may apply and receive this bursary at the discretion of the Bursary Selection Committee. Applicants will be required to demonstrate proof of (a) or (b) above.

St. Andrew's Society Bursary: Established in 1971 by the St. Andrew's Society of Montréal. Eligibility: This bursary is open to all full-time students. Applicants will be required to demonstrate proof of Scottish birth or ancestry.

Inge Thurm Memorial Bursary in Women's or Gender History: Established in 1997 through the generosity of friends and colleagues of Dr. Rosemary Schade on the occasion of her marriage. The bursary is named in honour of Dr. Schade's mother, Mrs. Inge Thurm. Eligibility: Awarded annually to a full-time undergraduate or graduate student (in alternating years) in the Department of History.

Nancy Torbit Memorial Bursary: Established in 1998 through the generosity of the family, friends and colleagues in memory of Nancy Torbit, former Director of Health Services. Eligibility: Open to all full-time students regardless of field of study.

University Women's Club of Montréal Bursary*: The University Women's Club of Montréal Public Foundation offers two bursaries to mature women who are enrolled in full-time undergraduate study at Concordia. Eligibility: Awarded to students who have completed preferably two years in an undergraduate programme. Both financial need and academic standing are considered when determining the successful candidates. Application forms are available at the Financial Aid and Awards Office, and must be submitted by April 1.

Fred Weinstein Bursary: Established in 1997 as a bequest of Mr. Fred Weinstein. Eligibility: Open to all undergraduate students.

Open to Students in the Faculty of Arts and Science

Joel and Jeffrey Birenbaum Memorial Bursary: Established in 1972 in memory of Joel Birenbaum, a former student of Sir George Williams University, and renamed in 1992 in remembrance of Jeffrey Birenbaum, the father of Joel Birenbaum. Eligibility: Open to all full-time undergraduate students.

Ethel Campbell — P.E.O. Memorial Bursary: Established in 1967 by Colin C. Campbell in loving memory of his wife, Ethel May Routledge Campbell. Eligibility: Open to all full-time undergraduate female students.

Biology

Donald L. Peets Bursary: Established in 1990 in recognition of the contributions made by Donald L. Peets to student life and services during his many years of association with Sir George Williams University and Concordia University as a teacher and administrator. Eligibility: Open to all full-time undergraduate students in the Biology Department.

Henry I. Chinks Memorial Bursary: Established in 1965 in memory of the late Henry I. Chinks, Vice-President, Avmor Ltd.. Eligibility: Preference is given to part-time Chemistry students.

English Literature

Arianne Johnston-Kip Little Memorial Bursary: Established in 1992 by family and friends in memory of Arianne Johnston and Kip (Christopher) Little, former English students at Concordia University. Eligibility: Open to all full-time undergraduate students in the English Department. Every second year, the bursary will be given to a mature student.

Geography

Maria Ildiko Beardsley Memorial Bursary: Established in 1997 by family and friends of Maria Ildiko Beardsley. Eligibility: Awarded to an undergraduate student in the Department of Geography pursuing full-time study in an Urban Studies programme.

Mix 96 — Nick Auf der Maur Memorial Bursaries: Established by Mix 96 in 1989 to reward students who show promise in their field of study, two bursaries will be awarded annually to one female and one male student in the Communication Studies or Journalism programmes. Eligibility: Awarded on the basis of academic achievement and financial need. Applicants will be required to submit a short essay on the role of radio in the Montréal community. For further information, contact the Chair of either the Department of Communication Studies or Journalism: (514) 848-2465.

Philosophy

Ernest Haznoff Memorial Bursary: Established in 1964 in memory of the late Ernest Haznoff (BSc 1959). Eligibility: Open to any full-time undergraduate student pursuing a Major or Honours in Philosophy.

Political Science

Marjorie S. Dewitz Bursary: Established in 1988 by friends and colleagues of Marjorie Dewitz on the occasion of her 70th birthday. Eligibility: Awarded to a full-time female student who is a Canadian Citizen or a Permanent Resident, pursuing a Major in Political Science. The recipient will be selected by the Undergraduate Bursary Selection Committee on the basis of nominations received from the Chair of the Political Science Department.

Hannah Amiouny Bursary: Established in 1998 in memory of Hannah Amiouny by friends and family. Eligibility: Awarded to a full-time undergraduate student in the Political Science Department.

Sociology and Anthropology

Tammy Bedford and Gary Byng Memorial Endowment Bursary: Established in 1996 by the parents of Tammy Bedford in memory of both Tammy Bedford and her friend Gary Byng. Eligibility: Awarded to deserving undergraduate students in the Faculty of Arts and Science, Department of Sociology and Anthropology, pursuing a Major in Sociology with an interest in Third World countries.

Concordia University Undergraduate Field Work Association Bursary*: Established in 1996 by the Concordia Undergraduate Field Work Association to provide in-course bursaries to deserving undergraduate students who are intending to undertake field work. Eligibility: Awarded to deserving students pursuing a Major, Honours or Specialization programme in these participating departments: Classics, Sociology or Anthropology. Students must have completed 18 credits and must submit a proposal along with the in-course bursary application form. A minimum GPA of 3.0 is required.

Open to Students in the Faculty of Commerce and Administration

Theodore Ronis Memorial Bursary: Established through the National Council of Jewish Women of Canada and by his friends, in memory of the late Theodore Ronis to honour his friendship. Eligibility: Awarded annually to a deserving student studying (preferably, but not necessarily) towards a Bachelor of Commerce degree. Preference will be given to a male student.

Jean-Paul Vallée/Royal LePage Bursary: Established in 1987 by family, friends, and associates to honour the late Jean-Paul Vallée. Eligibility: Awarded annually to a full-time undergraduate student.

Accountancy

Professor James Gilchrist Finnie Bursary: Established in 1976 by faculty and staff of Sir George Wiliams University, former students, colleagues, and business friends in recognition of Mr. Gilchrist Finnie's many years of devoted service to the University. Eligibility: Awarded annually, on the basis of merit and/or need, to an undergraduate student who is pursuing a Major in Accountancy, and entering his/her final year. Selection shall be at the discretion of the In-course Bursary Selection Committee.

Maurice Gold Memorial Bursary: Established by family, friends, and colleagues of Dr. Maurice Gold, a former faculty member of the Department of Accountancy. Eligibility: Awarded to an undergraduate student pursuing a Major in Accountancy who is deserving, both academically and financially.

Nathan H. Messer Bursaries: Established in 1971 by business associates and clients of Nathan H. Messer on the occasion of his retirement. Eligibility: Two bursaries are awarded annually to financially deserving students entering their final year, who are pursuing a Major in Accountancy. Awards are made following consultation with the Chair of the Department.

Schwartz Levitsky Feldman Bursary: An annual in-course bursary established through the generosity of the Schwartz Levitsky Feldman accounting firm. Eligibility: This non-renewable bursary is available to second- or third-year full-time students pursuing a Major in Accountancy. The bursary is granted on the basis of financial need and good academic standing.

Administration

Institute of Chartered Secretaries and Administrators in Canada (Québec Branch) Bursary: Established in 1995 by the ICSAC for a three-year period to recognize outstanding students. Eligibility: Open to all undergraduate Administration Majors.

Open to Students in the Faculty of Engineering and Computer Science

Myer F. Pollock Bursary: Established in 1971 by Mrs. Bess Pollock on the occasion of her husband's 60th birthday. Eligibility: Open to all students within the Faculty of Engineering.

Mechanical Engineering

The AlliedSignal Aerospace Inc. Bursary: Established in 1998 to provide for one annual in-course bursary by AlliedSignal, which is one of the world's premier companies, distinctive and successful in the aerospace industry. Eligibility: This non-renewable bursary is granted by the University to a second- or third-year full-time undergraduate student in Mechanical Engineering. The award is granted on the basis of financial need to a student in good academic standing.

Open to Students in the Faculty of Fine Arts

Faculty of Fine Arts Development Fund Bursaries: The Faculty of Fine Arts offers a number of bursaries, made possible by donations to its Faculty Development Fund. Eligibility: Open to students in the Faculty of Fine Arts who are financially deserving. Equal distribution along gender lines is desired. Selection is done by the Fine Arts Department from among those students who have applied for an in-course bursary.

Bruno and Stella Lebel Fine Arts Bursary: Established in 1981 in memory of the late Bruno and Stella Lebel. Eligibility: Awarded to a student in the Faculty of Fine Arts on the basis of financial need and high academic standing.

Cinema

André Bazin/George Sadoul Film Award: One of several staff- and faculty-supported awards, this was established in 1979 to honour a student in the Department of Cinema. Eligibility: Awarded annually to deserving students for outstanding work in Film Studies. This award is presented at the year-end screening within the Cinema Department.

b.b.c. Ani-Award: One of several staff- and faculty-supported awards, this was established in 1991 to honour a student in the Department of Cinema. Eligibility: Contact the Department of Cinema for further information: (514) 848-4666.

Jean-François Bourassa Memorial Bursary: Established in 1996 by family, friends, and colleagues in memory of Jean-François Bourassa, a talented film-maker and former student in the Department of Cinema at Concordia University. Eligibility: Awarded annually to a second-year film production student who has demonstrated an outstanding and creative use of cinematography in film-making, and has declared an interest in pursuing a professional career as a director of cinematography.

Cinar Award: One of several staff- and faculty-supported awards, this was established to honour a student in the School of Cinema. Eligibility: Contact the School of Cinema for further information: (514) 848-4666.

Matthew Czerny Award: This award commemorates a young man who combined striking talent with a generous, collaborative personality. He died in a climbing accident in September 1995, just before his last year of studies towards his degree in film production. Eligibility: Granted to support the production of a documentary film by a second- or third-year Cinema student. Judging is to be based on proposed scripts. Selection is done exclusively by the School of Cinema.

William K. Everson Award: One of several staff- and faculty-supported awards, this was established to honour a student in the Film Studies Programme. Eligibility: Selection is done exclusively by the School of Cinema.

Philip Russel George Award: One of several staff- and faculty-supported awards, this was established to honour a student in the Film Production Programme. Eligibility: Selection is done exclusively by the School of Cinema.

Zlatko Grgic Award: One of several staff- and faculty-supported awards, this was established to honour a student in the Film Animation Programme. Eligibility: Selection is done exclusively by the School of Cinema.

Mel Hoppenheim Award: This annually funded award is made possible by the donation of Mr. Mel Hoppenheim, President of Cité du Cinéma. This award has been granted since 1985 in recognition of an outstanding student in the Film Production Programme. Eligibility: Selection is done exclusively by the School of Cinema.

Contemporary Dance

James Saya Memorial Bursary: Established in 1991 by the Contemporary Dance Department in memory of a colleague and friend, James Saya. Eligibility: Awarded annually to a full-time undergraduate student whose Major is Contemporary Dance and who is entering his/her second or third year of study in the programme. The recipient will be selected by the Chair of the Department in consultation with the Financial Aid and Awards Office.

Studio Arts

George Balcan Bursary: Created through the donations of George Balcan's wife and his friends to mark his 60th birthday in 1991. George Balcan spent more than 25 years as the morning host of CJAD radio. He is also an accomplished pastel artist and a member of the Canadian Pastel Society. His works have won numerous awards and are included in several significant Canadian collections. Eligibility: The recipient is selected based on the recommendation from the Chair of the Department of Studio Arts and whose Major is Painting and Drawing.

John Jackman Bursary: Established by Mrs. Beth Swayne Jackman in memory of her husband, John Jackman, a former student in the Faculty of Fine Arts. Eligibility: Awarded annually to a student in a visual arts Major relating to Studio Art practice. The award will be given on the basis of scholastic achievement, demonstration of talent in the discipline of study, and financial need.

Jack Lehman Bursary: Established in 1987 by the friends of Jack Lehman on the occasion of his 60th birthday. Eligibility: Open to all first-year students in the Ceramics section of the Department of Studio Arts.

Alfred Pinsky Emergency Bursary: Established by a group of anonymous donors in 1987 to assist financially needy and deserving students in dire need of financial help, this bursary allows students who may otherwise withdraw from school due to a lack of resources to continue their education at Concordia University. This bursary is reserved for crisis situations. Eligibility: Recipients are recommended by the Department of Studio Arts. This award is not open for competition or application.

Sarah Singer Memorial Bursary: Established by Dr. Abraham Singer in memory of his sister Sarah, an artist and graduate of the Faculty of Fine Arts of Concordia University. This bursary is to help a financially and academically deserving student studying in the Department of Studio Arts. Eligibility: Awarded to a full-time undergraduate student in the Department of Studio Arts.

Theatre

Jeffrey David Skowronski Dramatic Arts Bursary: Established in 1988 by the Skowronski Family in memory of their son, Jeffrey David. Eligibility: Awarded annually to a full-time undergraduate student whose Major is Theatre.

Loyola Foundation Inc. Bursaries

Several endowment funds which originated from donors wishing to support Loyola College allowed for the establishment of these bursaries. Their donations were turned over to the Loyola Foundation shortly after the Foundation's creation in 1973 to be used for objectives, activities and purposes that would "foster and maintain the tradition and spirit of Loyola College," irrespective of the major structural changes anticipated at the time. It is the continuing wish of the Foundation that these bursaries encourage and support the education of persons of good character who respect and share the tradition and spirit of Loyola College.

The awards funded by the Loyola Foundation consist of a variable number of bursaries of \$1,000 each. The bursaries shall be subject to annual renewal.

This endowment is the amalgamation of the following awards:

The Dr. William Atherton History Prize Fund
The Ursula Carling Fund
The Mrs. John Moriarty Fund
The St. Ignatius Men's Association Fund
The Clive Moore Memorial Fund
The George V. Uihlein Jr. Memorial Fund
The O'Hearn and O'Connor History Prize Fund
The Loyola Alumni Association Fund
The James Webber Trust Fund
The Clarence G. Smith Memorial Fund

The Susan Langley Fund
The Loyola Evening Students' Fund
The Professors McGuigan and McPhee Fund
The Francis J. Dowling Fund
The Lilley F. Barry Fund
The Kenneth J. McArdle Memorial Fund
The Charles J. Brown Memorial Fund
The Gordon Bennett Memorial Fund
The Avon Products of Canada Fund

Eliaibility:

- available to full-time students in an undergraduate programme at Concordia University who are, themselves, or who have an ascendant who was a graduate of Loyola High School or Loyola College;
- required presentation of a duly completed application form establishing financial need in the judgement of Concordia University;
- renewable annually on a new application subject to continuing full-time involvement, satisfactory academic progress and continuing financial need in the judgement of Concordia University.
 Application:

Interested candidates must submit a completed University In-course Bursary application form along with proof of relationship with the ascendant.

Concordia University Senior Student Bursary Programme

Concordia University has, for many years, endeavoured to facilitate access to university studies for senior citizens. The University is happy to offer bursaries to help defray the tuition cost of Senior students' studies. These bursaries are non-renewable, but recipients may apply in successive years.

- Eligibility: Applicants must be 65 years of age or over, and registered as full- or part-time students at Concordia University. Senior Independent, senior undergraduate or graduate students are eligible for this bursary.
- Value of Bursaries: The value is \$25 per credit for each level of study.
- Approval Process: Recipients will be selected on the basis of progress in their studies, and a personal statement indicating their financial need and how this bursary would be of assistance to them.
- Application Deadline: Application forms are available at the Financial Aid and Awards Office, and must be returned to this office by the following deadlines:

October 1 for students beginning or continuing their studies in the Fall Term. February 1 for students beginning their studies in the Winter Term, or for those who become eligible during the Fall Term.

GRADUATE PROGRAMMES

400

GRADUATE PROGRAMMES

Dean CLAUDE BÉDARD Executive Secretary
JOANNE BEAUDOIN

Associate Deans ROSEMARY DRAGE HALE JAMES E. JANS

Location

School of Graduate Studies 1455 de Maisonneuve Blvd West Montréal, Québec H3G 1M8 The office is located at: 2145 Mackay Street (514) 848-3800

SCHOOL OF GRADUATE STUDIES

The graduate programmes offered by the University are divided into doctoral, master's, diploma and certificate programmes. Doctoral programmes offer students the opportunity to carry out fundamental and applied research. The results of this research are presented in the form of a thesis containing an original contribution to knowledge. Master's and doctoral theses are defended in public examinations. The length and specific format of a doctoral thesis is discipline dependent. All doctoral programmes require the passing of comprehensive examinations and a minimum of 90 credits of study. At the master's level, the University offers a variety of thesis and non-thesis options. All master's programmes require a minimum of 45 credits. Some master's programmes also have a comprehensive

The academic goals of the graduate diploma programmes are somewhat different from those of doctoral and master's programmes. They are designed either to offer a further specialization in a field or discipline already studied at the undergraduate level, or they provide the introduction to a new field of study or discipline, with the express intent to develop some level of specialized knowledge. A graduate diploma consists of a minimum of 30 credits and normally a maximum of 33 credits. Diploma programmes do not require a thesis, although a graduating essay, project or report may be required. Diploma programmes may require a comprehensive examination. Graduate certificates are designed to use existing departmental graduate resources to serve a

professional clientele which is seeking an upgrading and advanced graduate training over a short time frame. The normal academic base for graduate certificates is the graduate courses presently offered by an academic department, configured in a way to serve the needs of the clientele. The focus of the certificate programme should be directed to the needs of the professional clientele; it will be specialized in scope rather than being of a general nature.

With the exception of the special individualized doctoral and master's programmes and the Humanities doctoral programme, all graduate programmes offered by the University are administered by a particular academic department or programme in one of the four Faculties of the University, under the general supervision of the Council of the School of Graduate Studies and its chair, the Dean of Graduate Studies and Research. All graduate programmes are described in the School of Graduate Studies Calendar. Each description outlines the full-time faculty involved in the programme, the objectives of the programme, and the research interests of the faculty. Admission requirements, application procedures, degree requirements and programme options are specified. In most cases, courses are given in the late afternoon and evening, or in the evening only, making it possible for both full-time and part-time students to attend. Please contact the graduate programme director at the number indicated for further information.

Effective June, 1994, students may choose to receive their degrees in either the new gender neutral nomenclature of Baccalaureate, Magisteriate, and Doctorate or the traditional nomenclature of Bachelor, Master, and Doctor.

Department o	of Applied	Linguistics
--------------	------------	-------------

MA	Joanna White	848-2455
Department of Applied Human Sciences MA	James F. Gavin	848-2272
Department of Art Education and Creative Arts Therapies		
MA & PhD (Art Education)	Elizabeth J. Saccá	848-4649
MA in Creative Arts Therapies	Leland Peterson	848-4643
Diploma in Art Education .	David Pariser	848-4646

Department of Art History MA & PhD	Joan Acland	848-4696
Department of Biology MSc & PhD	Luc Alain Giraldeau	848-3425
Department of Building, Civil & Environmental Engineering Graduate Certificate, MASc, MEng & PhD (Building) Graduate Certificate, MASc, MEng & PhD (Civil)	Fariborz Haghighat Fariborz Haghighat	848-3192 848-3192
Department of Chemistry and Biochemistry MSc & PhD	Justin B. Powlowski	848-3339
Faculty of Commerce and Administration MBA Executive MBA AMBA (Airline and Aviation) MSc (Administration) PhD (Administration) Diploma in Accountancy Diploma in Administration Diploma in Sport Administration Graduate Certificates in DIA/DSA	Lea Prevel Katsanis Alan Hochstein Dale D. Doreen Gary W. Johns Gary W. Johns Gail Fayerman Clarence Bayne Clarence Bayne Clarence Bayne	848-2770 848-2932 848-2959 848-2959 848-2959 848-2774 848-2976 848-2976
Department of Communication Studies MA (Media Studies) PhD (Communication) Diploma in Communication Studies	Maurice Charland Kim Sawchuk Hal Thwaites	848-2546 848-4257 848-2539
Department of Computer Science MCompSc & PhD Diploma in Computer Science	Tien D. Bui J. William Atwood	848-3014 848-3046
Department of Economics MA & PhD Diploma in Economic Policy	M. Gregory Leblanc M. Gregory Leblanc	848-3911 848-3911
Department of Education MA (Educational Studies) MA (Educational Technology) PhD (Educational Technology) MA (Child Study) Diploma in Adult Education Diploma in Instructional Technology	Paul Bouchard David Wells Gary Boyd Sandra Weber Paul Bouchard David Wells	848-2011 848-2039 848-2044 848-2024 848-2015 848-2039
Department of Electrical and Computer Engineering MASc, MEng & PhD	Asim J. Al-Khalili	848-3119
Faculty of Engineering and Computer Science MEng (Aerospace)	J.V. Svoboda	848-3150
Department of English MA	Marcie Frank	848-2356
Département d'études françaises MA (Traductologie) Diploma in Translation	Sherry Simon Paul Bandia	848-7500 848-7500
Faculty of Fine Arts MA (Film Studies) MFA (Studio Arts) Diploma in Advanced Music Performance Studies	Mario Falsetto Gisèle Amantea Liselyn Adams	848-4634 848-4607 848-4716
Department of Geography MA (Public Policy and Public Administration Geography Option)	I. Max Barlow	848-2051

Department of History MA & PhD	Norman Ingram	848-2436
Humanities Programme PhD	Sherry Simon	848-2096
Department of Journalism Diploma in Journalism	Linda Kay	848-2469
Department of Mathematics and Statistics MA, MSc & PhD MTM (Master/Magisteriate in the Teaching of Mathematics)	Syed Twareque Ali Anna Sierpinska	848-3237 848-3239
Department of Mechanical Engineering MASc, MEng & PhD	Rafik A. Neemeh	848-3146
Department of Philosophy MA	Stanley G. French	848-2506
Department of Physics MSc & PhD	J. David Cheeke	848-3292
Department of Political Science MA (Public Policy and Public Administration)	Horst Hutter	848-2111
Department of Psychology MA PhD	Michael Conway Norman Segalowitz	848-7541 848-2239
Department of Religion MA (History and Philosophy of Religion) MA (Judaic Studies) PhD Diploma in Theological, Religious & Ethical Studies	Michael D. Oppenheim Michael D. Oppenheim Frederick B. Bird Leslie Orr	848-2067 848-2078 848-2070 848-2067
Department of Sociology and Anthropology MA (Cultural Anthropology) MA (Sociology)	Christine Jourdan Christine Jourdan	848-2161 848-2161
Department of Theological Studies MA (Theological Studies)	Christophe Potworowski	848-2481
Special Individualized Programmes (S.I.P.) MA & PhD	Rosemary Drage Hale	848-3889

INDEX

500 INDEX

NOTE: Where the subject matter referred to appears on more than one consecutive page, only the first page number is given.

Α	International Students, 28, 92
Academic Calendar: 13	January, 29 Language Proficiency, 29
Academic Misconduct: 60	Mature Students, 29, 35
Academic Regulations: Academic Performance Requirements, 59 Academic Re-evaluation, 55 Appeals, 56 Code of Conduct, 60 Engineering and Computer Science, 405 Evaluation, Grading, Examinations and Advancement, 52 General Information, 46 Programmes and Regulations, 49 Re-evaluation Decision, 55 Weighted Grade Point Average, 59	Permanent Residency Documents, 30 Pro-Tanto Credits and Exemptions, 28 Proof of Québec Residency, 31 Québec Residency, 31 Regulations, 27 Requirements, 27 Selection Process and Notification, 32 Special, 29 Transcript, 31 Transfers from Other Post-Secondary Institutions, 28 Transfers from Other Universities, 28 Visiting Students, 29
Academic Standing: Arts and Science, 131 Commerce and Administration, 372	Adult Education: 200 Certificate in, 200
Engineering and Computer Science, 405	Advocacy and Support Services: 80
Fine Arts, 465	Alumni: 100
Academic Year: 26, 46	Anthropology: 331 Courses, 332
Acceptable Standing:	Appeals: 56
Arts and Science, 131 Commerce and Administration, 372	Applied Human Sciences: 133
Engineering and Computer Science, 405	Archaeology: 158
Accountancy: 376 Special Programmes in, 400	Art Education and Art Therapy: 468
Administration: 398	Art History: 472
Bachelor of/Baccalaureate in, 371	Art Therapy: 468
Officers of the, 22	Arts: Bachelor of/Baccalaureate in, 126
Admission: 25, 29 Academic Documents, 31 Application Deadline Dates, 29 Application Fee, 29 Applying for, 29 Arts and Science, 125 Cégep Applicants, 32 Citizenship Documents, 30 Commerce and Administration, 370 Conditional, 32 Deposit, 32 Documents Required, 30, 31 Engineering and Computer Science, 404 Entry Dates, 29 Extended Credit Programme, 28 Fine Arts, 462	Arts and Science: Faculty of (General), 123 Academic Performance Regulations, 131 Certificate Programme, 131 Co-operative Education, 151, 184, 218, 273, 288, 351 Degree Requirements, 128 Equivalents Index, 557 Extended Credit Programmes, 128 General Certificate in, 131 General Studies in, 124 Honours Programmes, 130 Mature Student Entry, 128 Profiles, 125 Programmes and Admission Requirements, 125
Former Concordia Students, 28 from Other Canadian Provinces, 27 from Outside Canada, 28 from Québec Institutions, 27 Independent Students, 30	Arts and Science: Faculty of (Departments/Programmes), Adult Education, 200 Applied Human Sciences, 133 Biology, 142

Chemistry and Biochemistry, 150	Engineering, 407
Classics, Modern Languages and	Fine Arts, 464
Linguistics, 157	Science, 126
Colleges, Institutes and Schools, 351, 352, 356, 359, 362, 365	Biology: 142
Communication Studies, 173	Board of Governors: 20
Computer Science, 351 Economics, 183	Building Engineering: 421
Education, 191	D
English, 203	Building, Civil and Environmental
English as a Second Language, 337	Engineering: 421
Études françaises, 216	Bursaries: 89
Exercise Science, 232	Concordia University In-Course, 587
French, 216	Entrance, 587
Geography, 238	In-Course, 89
Geology, 245	Summer Language Immersion Course, 86
History, 249	Business and Administration: 105
Individual Studies Programme, 260	Dadinoso and Administration. Too
Institute for Co-operative Education, 351	Business:
Interdisciplinary Studies, 260	Certificate in, 399
Journalism, 265	International, 389
Library Studios 260	Studies, 399
Library Studies, 269 Lonergan University College, 356	
Mathematics and Statistics, 272	С
Philosophy, 282	
Physics, 288	Calendar: Academic, 13
Political Science, 294	Campus Centre: 80
Psychology, 304	Campus Contro. 00
Religion, 314	Campus Ministry: 81
School of Community and Public Affairs, 359	Career and Placement Service: 84
Science and Human Affairs, 322 Science College, 362	Career Resource Centre: 83
Simone de Beauvoir Institute, 365	
Sociology and Anthropology, 325	Centre for Continuing Education: 103
Teaching of English as a Second Language, 337	Centre for Mature Students: 35
Theological Studies, 344	Centre for Native Education: 82
Urban Studies, 348 Women's Studies 365	Ceramics: 508
	Certificate Programmes: 51, 112
Athletics: 85	Certificates Offered:
Awards, Prizes and Scholarships: 575	Adult Education, 200
Awards: 576	Arts and Science (General), 131
Arts and Science, 120	Business Studies, 399
Commerce and Administration, 121	Community Service, 134
Concordia University, 89	Education, 192
Engineering and Computer Science, 121	Family Life Education, 134
External Sponsors, 89	French Language, 217
Faculty, 120	Langue française, 217
Fine Arts, 121	Library Studies, 269
Governor General's, 120	Pastoral Caregiving, 344
Special, 121	Special (Commerce and Administration), 400
University, 120	Teaching of English as a Second
•	Language, 338
В	Women's Studies, 366
	Certification: Teachers, 112
Bachelor of/Baccalaureate in: Administration, 371	Chaplains: 81
Arts, 126	Cheating: 61
Commerce, 371	Chemistry and Biochemistry: 150
Computer Science, 448 Education, 126	•
(Teaching English as a Second	Child Care Services: 81
`Language), ັ337	Child Studies: 192

Cinema: 478 Computer Science, 400 **Decision Sciences and Management** Civil Engineering: 421, 423 Information Systems, 380 Economics, 384 Classes: Cancellation of, 48 Finance, 385 Classics, 157 International Business, 389 Management, 391 Classics, Modern Languages and Marketing, 395 Linguistics: 157 Communication Studies: 173 Co-operative Education: Diploma in, 174 Institute for, 114 Programmes, 115 Communications/Visual Arts: 104 Schedule, 118 Community Service: Certificate in, 134 Co-operative Programmes: 115 Accountancy, 376 Computer Applications: 449 Building Engineering, 424 Chemistry and Biochemistry, 151 Computer Engineering: 411 Civil Engineering, 424 Computer Engineering, 415 Computer Institute: Continuing Education, 105 Computer Science, 450 Computer Science: 448 **Decision Sciences and Management** Arts and Science, 351 Information Systems, 380 Bachelor of/Baccalaureate in, 448 Economics (Arts and Science), 184 Commerce and Administration, 380, 400 Electrical Engineering, 415 Course Descriptions, 452 Finance, 385 French Translation, 218 Computer Systems: 449 Industrial Engineering, 420 Management, 392 Concentration: Type of, Marketing, 395 Certificate, 51 Mathematics and Statistics, 273 Combination, 51 Mechanical Engineering, 420 Double Minor, 51 Physics, 288 Honours, 50, 129 Software Engineering, 420 Major, 51, 129 Minor, 51, 129 Code of Conduct: Requirements, 50 Academic, 60 Specialization, 50, 129 Appeals, 65 Hearing, 64 Concordia: General, 7 Sanctions, 64 Concordia University College Scholarships: 584 Colleges, Institutes and Schools: 351, 352, 356, 359, 362, 365 Concordia University Entrance Scholarships: 576 Combination Programmes: 51 Concordia University In-Course Bursaries: 587 Commerce: Bachelor of/Baccalaureate in, 371 Concordia University In-Course Commerce and Administration: Faculty of Scholarships: 578 (General), 369 Academic Performance Regulations, 372 Conditional Standing: Admission Requirements, 370 Arts and Science, 131 Co-operative Education, 376, 380, 385, Commerce and Administration, 373 392, 395 Engineering and Computer Science, 405 Equivalents Index, 567 Extended Credit Programme, 371 Contemporary Dance: 489 General Information, 373 Continuing Education: Centre for, 103 Graduation Requirements, 373 Business and Administration, 105 Programme Options for Communications/Visual Arts, 104 Non-Commerce Students, 399 Programmes, 370 Computer Institute, 105 General Seminars and Workshops, 107 Special Certificates, 400 Hospitality Management and Tourism, 107 Special Programmes in Accountancy, 400 Language Institute (English, French and Commerce and Administration: Faculty of Spanish), 107 (Departments/Programmes), Management and Community Development Accountancy, 376 (Institute), 108 Administration, 398 Business Studies, 399 Convocation Medals and Prizes: 119

Councils: Arts and Science, 20 Commerce and Administration, 21 Engineering and Computer Science, 21 Fine Arts, 21 Student Life, 22	Fall Term, 26 Falsification, 61 Full-Time Students, 47 Honours Programmes, 50, 129 Independent Students, 27, 30 Major Programmes, 51, 129
Counselling and Development Services: Career and Placement Service, 84 Career Resource Centre, 83 Counselling, 83 Student Learning Services, 83	Mature Students, 27 Minor Programmes, 51, 129 Multiple Submission of Projects, 61 Part-Time Students, 47 Personation, 61 Plagiarism, 61
Counselling Services: 83 Course Load: Arts and Science, 47 Commerce and Administration, 47 Engineering and Computer Science, 47, 406 Fine Arts, 47, 465 Summer Session, 47	Pro-Tanto Credits, 27 Regular Session, 26, 46 Residence Requirements, 27 Specialization Programmes, 50, 129 Student Record, 49 Summer Session, 26, 46 Transcript, 49 Undergraduate Students, 27
Course Notations: Deferred (DEF), 53, 54 Did Not Write (DNW), 53 Discontinued (DISC), 53 Incomplete (INC), 53 Medical (MED), 53, 54 Courses: Cancellation of, 48	Visiting Students, 27, 29 Winter Term, 26 Degree Regulations: 50 Degree Requirements: Arts and Science, 128 Commerce and Administration, 371 Computer Science, 449
Graded DISC, DNW, INC, MED, DEF, 53 Open and Distance Learning, 109 Repetition of, 60 Withdrawal from, 44, 48	Engineering, 408 Fine Arts, 464 Design Art: 491 Did Not Write (DNW): Course Notation, 53
Creative Writing: 204	Digital Image/Sound and Computer Science: 458
Credit: Courses with Statistical Content, 573	Digital Image/Sound and the Fine Arts: 495
Definition of, 46 Exemptions, 28 External, 28 Pro-Tanto, 28	Diploma Programmes: 596 Disabled Students:
Curriculum:	Scholarships and Awards, 86 Service for, 81
Regulations, 49	Discontinued (DISC): Course Notation, 53
D	Doctoral Programmes: 596
Dance: 489	Double Minor: Definition of, 51
Day Care Services: 81	Drama: 523
Decision Sciences and Management Information Systems: 380	E
Deferred (DEF): Course Notation, 53, 54	Early Childhood and Elementary Education: 191
Deferred Examinations: 57, 58 Definitions: 61	Economics: Arts and Science, 183 Commerce and Administration, 384
Academic Misconduct, 61 Academic Year, 26 Cheating, 61 Combination Programmes, 51 Course Notations, 53 Credit, 46 Double Minor Programmes, 51 Exemption, 27 Extended Credit Programme Students, 27	Education: 191 Bachelor of/Baccalaureate in, 126 Bachelor of/Baccalaureate in Arts (Adult Education), 200 Bachelor of/Baccalaureate in (English as a Second Language), 337 Certificate in, 192 Certificate in Adult, 200

Electrical and Computer Engineering: 411	Environmental Engineering: 421
Engineering: Bachelor of/Baccalaureate in, 417	Equivalents Index:
Engineering and Computer Science: Faculty of (General), Academic Regulations, 405 Admission Requirements, 404 Canadian Council of Professional	Arts and Science, 558 Commerce and Administration, 567 Courses with Statistical Content, 573 Engineering and Computer Science, 572 Fine Arts, 569
Engineers, 408 Co-op Format, 407	Études françaises: 216 Certificat en langue française, 217
Co-operative Education, 415, 420, 424, 450, 452	Evaluation: Academic, 52
Degree Requirements, 408 Equivalents Index, 572 Extended Credit Programme, 407, 449 Grading System, 405 Graduation Regulations, 406 Order of Engineers of Québec, 408 Programmes Offered, 404 Registration Regulations, 406 Regulations, 405 Supplemental Examinations, 406 Engineering and Computer Science: Faculty of	Examinations: 52, 57 Applications for Supplemental and Deferred Examinations, 58 Conduct During, 61 Deferred, 57, 58 Final, 57 Learning Disability, 81 Replacement, 57, 58 Supplemental, 57, 58 (Arts and Science), 130 (Engineering and Computer Science), 406
(Departments/Programmes), Building Engineering, 421	Exemption: Definition of, 27
Building Engineering: Courses, 430	Exercise Science: 232
Building, Civil and Environmental Engineering, 421 Civil Engineering, 421 Civil Engineering: Courses, 432	Extended Credit Programme Students: Definition of, 27
Computer Applications, 449	_
Computer Engineering, 411 Computer Engineering: Courses, 434 Computer Science, 448 Computer Science: Courses, 453 Computer Systems, 449 Digital Image, Sound and Computer	F Faculties: Arts and Science, 123 Commerce and Administration, 369 Engineering and Computer Science, 403 Fine Arts, 461
Science, 458 Electrical and Computer Engineering, 411 Electrical Engineering: Courses, 437 Engineering: Courses, 426 Engineering Course Descriptions, 425 Engineering and Computer Science:	Faculty Councils: Arts and Science, 20 Commerce and Administration, 21 Engineering and Computer Science, 21 Fine Arts, 21
Courses, 425 Engineering Mathematics: Courses, 425 Environmental Engineering, 421 Industrial Engineering, 416 Industrial Engineering: Courses, 440 Information Systems, 449	Faculty: Full-Time, 532 Part-Time, 545 Research, 544 Retired, 552
Mechanical Engineering: 416 Mechanical Engineering: Courses, 442 Social Aspects of Engineering: Courses, 429 Software Engineering, 450 Software Engineering: Courses, 456 Software Systems, 449	Failed Standing: 53 Arts and Science, 131 Commerce and Administration, 373 Engineering and Computer Science, 406 Fine Arts, 465
English as a Second Language: 337	Fall Term: 26
English Language Proficiency Requirement: 29	Falsification: 61
English: 203	Family Life Education: Certificate in, 134
Creative Writing, 204 Teaching as a Second Language, 337	Fees: Academic, 39 Application for Admission, 29
Entrance Buraries: 587	Residence, 90
Entrance Scholarships: 576	Fibres: 509

-ilm Studies: 478	Governors: Board of, 20
Finance: 385	Grade Point Average: 59 Arts and Science, 131
Financial Aid: Disabled Students, 86 External Spaceure, 80	Commerce and Administration, 372 Engineering and Computer Science, 405
External Sponsors, 89 Information and Scholarships, 86	Grading System: 52
International Students, 89 Official Language Monitor Programme, 87	Graduate Programmes: 595
Scholarships and Bursaries, 89 Senior Students, 89 Short-Term Advances, 88 Summer Language Immersion Course	Graduation: 49, 129 High Academic Achievement, 60 Writing Skills Requirement, 51
Bursaries, 86 Tuition Deferrals, 88	Greek: 157
Work Study Programme, 88	Н
Fine Arts: Bachelor of/Baccalaureate in, 464	Health Services: 84
Fine Arts: Faculty of (General), 461 Academic Performance Requirements, 465	Hebrew: 163
Courses, 466	History: 249
Degree Requirements, 464 Equivalents Index, 569 Extended Credit Programme, 464 Graduation Requirements, 464 Mature Entry, 464 Performing Arts, 462	Honours: Definition of, 50, 129 Programmes, 50 Regulations: Faculty of Arts and Science, 130
Programmes and Admission	Hospitality Management and Tourism: 107
Requirements, 462 Programmes Offered, 462 Transfer Students, 464	Housing: Off-Campus and Residences, 90
Visual Arts, 462	1
Fine Arts: Faculty of Departments/Programmes), Art Education and Art Therapy, 468	Immigration Procedures: Required Documents, 94
Art History, 472 Ceramics, 508	Incomplete (INC): Course Notation, 53
Cinema, 478 Contemporary Dance, 489 Design Art, 491 Digital Image/Sound and the Fine Arts, 495 Fibres, 509	Independent Students: Academic Regulations re, 46 Admission of, 30 Definition of, 27, 30
Interdisciplinary Studies, 510	Individual Studies Programme: 260
Music, 497 Painting and Drawing, 510	Industrial Engineering: 416
Photography, 511	Information Systems: 449
Print Media, 511 Sculpture, 512 Studio Arts, 507	Institute for Co-operative Education: 113 Arts and Science, 351
Theatre, 523 Women and the Fine Arts, 513	Institute in Management and Community Development: 108
Foreign Students: 91	Insurance:
French Studies: 216	International Students, 96
Full-Time Students: Definition of, 47	Inter-University Agreement: 48
General Certificate in Arts and Science: 131 Geography: 238	Interdisciplinary Studies: Arts and Science, 260 Clusters, 262 Fine Arts, 510 Individual Studies Programme, 260 In Sovietite, 261, 467
Geology: 245	In Sexuality, 261, 467 Southern Asia Studies, 261
German: 158	International Business: 389

International Students: 82, 91	Master's Degree Programmes: 596
Admission, 28 Admission Requirements, 92	Mathematics and Statistics: 272
Adviser for, 92 Cost of Living (Expenses), 97	Mature Entry: 33
Employment Authorization, 97 Exemptions from Differential Fees, 95 Financial Aid, 90 Health and Accident Insurance, 96 Immigration Information, 94 Required Documents, 94 Tuition and Fees, 94 Italian: 158	Mature Students: Admission, 35 Arts and Science, 128 Centre for, 35 Definition of, 27, 35 General Information, 35 Programme Requirements, 36 Scholarships, 38, 89 Senior Students, 38
J	Mechanical Engineering: 416
	Medals: 119
January Admission: 29 Journalism: 265	Medical (MED): Course Notation, 53, 54
Journalism. 203	Mel Hoppenheim School of Cinema, 478
L	Minor: Definition of, 51, 129
Language Institute (English, French and	Multiple Submission of Projects: 61
Spanish): 107	Music: 497
Language of Examinations: 52	
Language of Instruction: 52	0
Language Proficiency: 29	Officers of the Administration: 22
Latin: 157	Ombuds Office: 77
Learning Disability:	0 15:4 1 : 400
Examinations, 81 Special Accommodations, 81	Open and Distance Learning: 109
	P
Special Accommodations, 81	
Special Accommodations, 81 Learning Services: 83	P
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81	P Painting and Drawing: 510
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269	P Painting and Drawing: 510 Part-Time Students: Definition of, 47
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries:	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87 Québec, 86	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282 Photography: 511
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87 Québec, 86 Short-Term Advances, 88 Lonergan University College: 356	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282 Photography: 511 Physics: 288
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87 Québec, 86 Short-Term Advances, 88 Lonergan University College: 356	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282 Photography: 511 Physics: 288 Plagiarism: 61
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87 Québec, 86 Short-Term Advances, 88 Lonergan University College: 356 M Major: Definition of, 51, 129	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282 Photography: 511 Physics: 288 Plagiarism: 61 Playwriting: 523
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87 Québec, 86 Short-Term Advances, 88 Lonergan University College: 356 M Major: Definition of, 51, 129 Management: 391	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282 Photography: 511 Physics: 288 Plagiarism: 61 Playwriting: 523 Political Science: 294
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87 Québec, 86 Short-Term Advances, 88 Lonergan University College: 356 M Major: Definition of, 51, 129 Management: 391 Management Information Systems: 380	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282 Photography: 511 Physics: 288 Plagiarism: 61 Playwriting: 523 Political Science: 294 Print Media: 511
Special Accommodations, 81 Learning Services: 83 Legal Information Services: 81 Liberal Arts College: 352 Librarians: 544 Library Studies: 269 Certificate in, 269 Diploma in, 269 Linguistics: 159 Loans and Bursaries: Federal and Provincial, 87 Québec, 86 Short-Term Advances, 88 Lonergan University College: 356 M Major: Definition of, 51, 129 Management: 391	P Painting and Drawing: 510 Part-Time Students: Definition of, 47 Pastoral Caregiving: Certificate in, 344 Peer Support Programme: 82 Performing Arts: 462 Personation: 61 Philosophy: 282 Photography: 511 Physics: 288 Plagiarism: 61 Playwriting: 523 Political Science: 294 Print Media: 511 Prizes: 119, 576, 585

Programmes: Certificate, 51, 112	Residence Requirements: 47 Definition of, 27
Certificate (Arts and Science), 131 Co-operative, 115 Combinations, 51	Residences and Housing: 90 Fees, 90
Continuing Education, 104 Diploma, 596 Doctoral, 596	Rights and Responsibilities: 68
Double Minor, 51 Extended Credit Programme Students: Definition of, 27 Graduate, 596 Honours, 50, 129 (Arts and Science), 130 Individual Studies, 260 Major, 51, 129 Master's, 596 Mature Students, 37 Minor, 51, 129 Specialization, 50, 129	S
	Scholarships: 89, 576 Concordia University College, 584 Concordia University Entrance, 576 Concordia University In-Course, 578 Entrance, 89, 576 In-Course, 89 Senior, 38
	School of Community and Public Affairs: 359
	Science and Human Affairs: 322
Programme Options for Non-Commerce Students: 399	Science: Bachelor of/Baccalaureate in, 126
Programme Profiles: Arts and Science, 125 Commerce and Administration, 370	Science College: 362
	Sculpture: 512
Engineering and Computer Science, 404 Projects: Multiple Submission of, 61	Second Bachelor's Degree: Residence Requirements, 47
Psychology: 304	Senate: Members of, 20
R	Senior Students: 37 Scholarships, 89
Re-evaluation: Academic, 55	Sexuality: Interdisciplinary Studies in, 261, 467
Recreation and Athletics: 85	Short-Term Advances: 88
Registration: 32, 42, 48, 94	Simone de Beauvoir Institute: 365
Regular Session: 14, 26, 46	Socio-Economic Services: 90
Regulations: Academic, 45 Academic Performance, 59 Admission, 26	Sociology and Anthropology: 325
	Software Engineering: 450
	Software Systems: 449
Degree, 50 Evaluation, Grading, Examinations, 52	Southern Asia Studies: 261
Failure, 53	Spanish: 158
Programmes and Regulations, 49 Supplemental Examinations, 54	Specialization: Definition of, 50, 129
Religion: 314, 344	Statistics: 272, 573
Replacement Examinations: 57, 58	Status:
Required Documents: Immigration Procedures, 94 Requirements: Academic Performance, 59	Full-Time Student, 47 Independent, 27, 30 Mature, 27 Part-Time Student, 47 Visiting Student, 27, 29
Admission, 27	Student Advocate Programme: 82
Admission – International Students, 92 Concentration, 50 Graduation, 49, 129 Residence, 27, 47	Student Associations: Alumni, 100 Concordia Student Union (CSU), 100
University Writing Test, 51	Graduate, 100

Student Exchange Programmes (International): 48	Theological Studies: 344 Certificate in Pastoral Caregiving, 344 Religion, 314
Student Learning Services: 83	Keligion, 314
Student Life and Student Services: 79	Traduction: 218 Courses, 228
Advocacy and Support Services, 80 Campus Ministry, 81	Training: Teachers, 112
Career and Placement Service, 84 Career Resource Centre, 83	Transcripts: 31, 49
Centre for Native Education, 82	Transfer:
Child Care, 81 Concordia Council on Student Life (CCSL), 80	Credits: 28, 47 Students: 464
Counselling and Development, 82	Transfers:
Disabled Students, Service for, 81 Financial Aid and Awards Information, 86	from Other Post-Secondary Institutions, 28 from Other Universities, 28
Health Services, 84 International Students, 82	Translation: 218
Legal Information Services, 81	Courses, 228
Mission, 80 Off-Campus Housing, 90	Tuition: 39
Peer Support Programme, 82	Deferrals, 88 International Students, 94
Recreation and Athletics, 85 Residences, 90	international Students, 94
Social and Cultural Activities, 80 Socio-Economic Services, 90	U
Student Advocate Programme, 82	Undergraduate Students:
Student Learning Services, 83	Association, 100
Student Life: Council on, 22	Definition of, 27
Student Record: 49	University Writing Test Requirement: 51
Student Request Committees: 49	Urban Studies: 348
Students: Classification of,	V
Extended Credit Programme, 27 Independent, 27, 30	Visiting Students:
Mature, 27, 35	Academic Regulations re, 46
Transfer, 28 Undergraduate, 27	Admission of, 29 Definition of, 27
Visiting, 27, 29	•
Studio Arts: 507	W
Summer Session: 17, 26, 46	Weighted Grade Point Average: 59 Arts and Science, 131
Supplemental Examinations: 54, 57, 58, 130, 406	Commerce and Administration, 372 Engineering and Computer Science, 405
Т	Western Society and Culture: 353
Teacher Certification:	Winter Term: 26
Assistance, 112 Citizenship Requirements, 112	Withdrawal from Courses or University: 44, 48
Teacher Training and Certification: 111	Women and the Fine Arts: 513
Teachers: Initial Certification Programmes, 112	Women's Studies: 365 Certificate in, 366
Teaching of:	Work Study Programme: 88
English as a Second Language, 337 Certificate in, 338	Writing: Creative, 204
Theatre: 523	Writing Skills Requirement: 51